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EDUCATION FOR PROFESSIONAL ACCOUNTANCY

ROY B. KESTER

BY PROFESSIONAL accountancy, as the term is used in this paper, is meant the vocation of accountancy, whether practice in the private or the public field. Where in the paper it may seem desirable in the interests of clarity to specify which field of practice is meant, attempt will be made so to do. In the main, however, the thesis, to the development of which the paper addresses itself, is of equal application to both fields.

Accountancy today takes pride in calling itself a profession. All of us who are interested in it recognize that in some respects it falls considerably short of measuring up to the ideals of a true profession; but its development has been so rapid, and it possesses so many characteristics of a profession, that we may without stretching the truth overmuch look upon it, even in its present state, as being a profession.

Over the years, as professional work has developed in various lines, the ministry, medicine, law, architecture, etc., two methods of preparation for its practice have invariably been used; namely, the apprenticeship method and the scholastic method. From the standpoint of the development of professions out of their earlier stages, in which they may be called trades or vocations, one might, I believe, with a high degree of accuracy, point out that the transition from the stage of the incipient or inchoate profession to the true profession, is usually marked by the taking over by the schools of the training necessary to prepare for the profession. Stated otherwise, it may be said that up until such time as a group of men working in a semiprofessional field become conscious of the shortcomings of training by the apprenticeship method and address themselves to the task of the organization of the basic subject matter of their field of practice in such manner that definite and specific outlines of the field can be established and the subject matter be made available for instructional use, such vocation cannot take seriously to itself the right to be called a profession.

After this need of definition of field and subject matter has been felt and supplied, the next step in the development of professional status concerns itself with the organization of its methodology into a scientific system of procedure. Apprenticeship has usually concerned itself chiefly with methodology, although, of course, subject matter and field can never be entirely divorced from tools and method. When these two things then, the field of activity or subject matter and manner of operation or methodology, can be recognized and defined, a vocation approaches very closely to the status of a profession, and its basic materials become available for scholastic preparation for entrance upon the profession. For the past twenty-five or thirty years, accountancy has been developing along these two lines and has become increasingly conscious of its shortcomings in the method of training for entrance upon its practice. Today, however, in my opinion, the point has been reached in that development at which claim may be reasonably made of a sufficient sharp definition of the scope of the profession and its subdivision into its basic elements and of the organization of courses of training in these elements and in its methodology, that the previous semi-profession may, in truth, be called a real profession.

The specific problem to which this paper addresses itself is the organization of a curriculum or course of training for professional accountancy. It should be pointed out that in the first place, the building of a curriculum is essentially a scholastic undertaking, and in the second place, that a large part of the work of a professional man or of a business executive is of necessity pedagogical in character, in that he is always faced with the task of training staff men to a proper understanding and performance of their tasks. Thus, the practitioner, as well as the pedagog, should be interested in the development of curricula and courses of training. However, the making of the necessary researches and the development of subject matter into specific courses of training, are primarily the work of the pedagog.

In approaching the work of curriculum building, the pedagog is apt to attack it first from the standpoint of job analysis, in an endeavor to see just exactly what the field to be studied comprises, and then to view it from an historical standpoint in order to be able to forecast its development into the future from its growth in the past. The work of job analysis at the present time has been pretty well done for us by various individuals and committees who have studied the field in an endeavor to let the public know the various types of professional work the accountant is qualified to perform and the differences between the various types.

Without going into the matter in great detail, it may be said that the following types of work comprise, in the main, the field of accountancy as it is practiced today:

1. The detailed audit for verification of the book record.
2. The so-called balance sheet audit, in which the emphasis is placed on the determination of the proper content and valuation of the balance sheet.
3. Cost accounting as applied both to production and distribution of commodities.
4. System installation and operation, including the development of a chart of accounts and suitable underlying records through which will flow the information needed for management and other purposes, and the building up of a suitable manual of instruction to bookkeepers to guide them in the operation of the system.
5. Tax work of various kinds, including the preparation of the necessary returns and the making of the investigations on which these returns rest, or of special investigations in support of contested items.
6. Special investigations comprising among others:
   a. Those in connection with the purchase of a business, or of a substantial interest in it, including as a usual thing, a measurement and evaluation of the earning capacity of a business as well as its present financial status.
   b. Those preliminary to the issue of new securities, such as bonds and preferred stocks.
   c. Those for the determination of the financial condition of a business as related to requests for short-term credit.
   d. Those in connection with law suits, involving the determination of damages, as in cases of patent and copyright infringements, breaking of contracts, voiding of leases, etc.
   e. Those concerned with the desirability of the introduction of new lines of product, including a measurement of the probable market, the price policy, etc.—this work very frequently being done by advertising agencies rather than by accountants.
   f. Those to serve as a basis for expert testimony.

In building a curriculum, some attention must always be given to the lines of probable future development of the profession. To this extent, a pedagog must be somewhat of a forecaster. From his knowledge of the history of the profession, from its early beginnings through the various stages of its development, he is in a position to forecast the probable developments in the near

future. Further than that he cannot hope to go, because the elements on which such development is based are too speculative in character. For example, a new law may be passed that gives unexpected impetus to certain phases of the work of a professional man.

It is apparent, therefore, that education for professional accountancy should cover all of the present field of activity of the profession. In addition, and in view of the fact that the profession may see a substantial and even remarkable development along the lines of business counselling, in the practice of which, the professional accountant will become the counsel or adviser to business in many of its fields of activity, no professional curriculum should fail to recognize it.

In order to point out a little more specifically what is meant by business counselling, it may be in order to refer to the internal organization of business for purposes of operation. As usually stated, business operation is carried on by means of four or five basic departments. These are usually denominated as the functions of finance, procurement, marketing, personnel, and general administration. Specific types of work or business problems are handled by these various departments or functions.

The basic work of the finance department is concerned with two duties; (1) that of original or capital financing, and (2) that of current or working capital financing. Not only must a business enterprise be provided with initial capital funds, but its funds must be so managed that current debts and costs of operation can be paid as they come due. In order properly to carry on its work, executives in charge of this department must have a broad knowledge of corporate financing, of banking, commercial credit, collection, etc.

The procurement department in an industrial organization is concerned with the purchase of raw materials and supplies needed for fabrication of the finished product which is sold to the trade. In a mercantile concern, on the other hand, the work of the department is concerned chiefly with the purchase of stock-in-trade ready for resale. Oftentimes, not only does the procurement department handle the work of buying raw materials and supplies for manufacture and finished product for resale, but also that in connection with all other supplies, repair parts, fixed assets, etc. The executives of the procurement function must, therefore, be judges of the quality of product, must have a knowledge of primary and wholesale markets where the product may be obtained, of transportation facilities needed to bring the product to its local market, of methods of manufacture, of industrial organization and personnel, etc.

The marketing department of the business concerns itself with establishing markets for its product, creating a demand for its merchandise and the actual work of supplying that demand, that is, of filling and shipping the orders. Thus in the broad sense, there is concentrated in this department the work of advertising and selling. The executives here need some technical training in advertising technique and in sales psychology, and in the trends of trade and fashion, and must develop a means of measuring the market's ability to absorb the product.

The personnel department of business concerns itself with securing the proper type of personnel for the successful operation of business. Hiring and training workers is necessarily a large part of the work of this department. Under its control and supervision are also frequently brought the health, recreational, and welfare activities of the concern. For the executives of this department a broad knowledge of humankind is quite necessary, and increasing importance is being attached to certain techniques such as psychological measurement, tests, and records, to give somewhat detailed information written up from periodic reports, of each person's performance so long as he remains with the organization.

The task of general administration is chiefly that of coördinating the work of these operating departments, so that the best results, as usually evidenced by net profits, will accrue at the end of the period. For this purpose, knowledge of what is taking place

in the outside world of business and affairs is just as vital as what is taking place within the business. The interrelations between his own business and government, the interrelation between his business and those of his competitors, the current status of business as a whole in relation to the economic cycle —knowledge of all of these outside relationships is absolutely essential to the development of proper business policies for the guidance of business operations. A careful control over the internal activities and operations of the business is, of course, very necessary also.

It is chiefly in this latter field, that of securing knowledge of, and control over the internal operations of the business, that accounting plays so important a part. When properly conceived, it develops the systems of records which will provide the necessary flow of information concerning operations to the responsible executives. It summarizes the details of this information, presenting the summaries in the form of reports, with interpretations where necessary. It thus is constantly in touch with all of the operating activities of a business. The accountant, whether in the public field, serving clients in various capacities, or in the private field as controller or other similar officer, thus has a real opportunity to know the intimate details of business operation. If, with that can be combined a broad knowledge of business problems and policies, and a really statesmanlike attitude toward the management of business, the field of the accountant offers large opportunity and takes on increasing importance. Because of his intimate relationship to these various fields of activity; because, as it were, he is the clearing house for information on which largely will be based the operating policies of a business; he is in an enviable position to serve as an understudy to management, or, as has been previously pointed out, to assume the vocation of business counsellor.

Thus, without a knowledge of the field of the profession as now practiced and of its future trends as based on the outgrowth of the past, no one is in a position to suggest a satisfactory program of training for professional accountancy. It is apparent, therefore, that if the accountant is to be prepared properly for his professional work, his technical training must rest upon a broad knowledge of the organization of business and of business practices. Because business practice is based on law, his training must necessarily include a knowledge of business law. Thus the foundational training on which professional accountancy must rest should include courses of study dealing with the basic functions of business as enumerated above, and these basic courses should be brought together into a philosophy of business management. With that background, acquired either before his entrance upon the study of accounting, but probably best acquired concurrently with his technical study, so that the interrelationships can be better brought out, he is in a position to undertake the technical aspects of his training. The content of his technical training in accounting should be grouped around the following major headings:

1. System work
2. Record making
3. Auditing
4. Report making and interpretation

As an introduction to his field of training, the approach must usually be through the group of courses dealing with record making. In acquiring his knowledge of how the accounting record is made, emphasis should be placed all the way along on the use to which these records are to be put. In other words, the ultimate goal of accounting, as the furnishing of suitable reports for executive or other use, must never be lost sight of.

After a knowledge of this section of his field has been acquired, it is probably logical to introduce a study of the audit function in accounting. Before the information flowing through the accounting records may safely and properly be used for executive action, its accuracy and correctness must be proven. This is the field of auditing. While, in the narrow sense, the audit function addresses itself exclusively to securing the accuracy and correctness of the record, the method of proof and the application of the

method to given situations must never be treated mechanically, but must hold in view the worth and importance of the particular record and of the use to which the information is to be put. Thus, auditing must never be treated as a wholly mechanical device.

With the data to be used in accounting reports thus proven accurate and reliable, the training of the student should next deal with the drafting of reports. Here consideration as to their proper content, the organization of that content, and the form of its presentation are of major importance. In this connection due attention must be given to the human element involved, that is, the particular person for whom the report is being drafted. Some instruction must also be given to students in the interpretation of reports. While the interpretation of reports is probably the function of the executive for whom the report is drafted, it is nevertheless true that the accountant, if possessed of a sufficiently broad background, may be invaluable in assisting in the interpretation of reports for functional executives and in advising as to development of proper policies based on such reports. It is here that his ability as a business counsellor may be particularly useful.

Somewhere, in the curriculum, provision must be made for the study of accounting system work. This should probably come after the student has been given pretty thorough instruction in record making and has acquired some knowledge of the fields of auditing and reports; for system building must always rest upon a knowledge of the type of information which operating executives will demand of their accounting departments. In many cases, the work of system building comprises also the development of a suitable system of paper work or business memoranda from which the formal accounting records will get their data. Some attention must also be given to the drafting of suitable forms of bookkeeping records and vouchers. In system work, particularly, the human factor must not be lost sight of, for securing the coöperation of the operating staff is of vital importance.

In these times of manifold and increasing taxes, no curriculum for professional accountancy training would be complete without ample provision for instruction in the accounting aspects of business taxation. A knowledge of the tax laws, of the required reports, and somewhat more than a general knowledge of the regulations should be a part of the equipment of every young man entering the profession. The field of taxation is highly specialized and many accountants do not pretend to be expert in it.

In any course of training for a profession, some consideration must be given to what may be called the business aspects of professional practice. Such things as the organization of the office, staff personnel, securing business contacts with clients, professional partnership organization, and ethical standards of practice must be treated.

Both the profession and the schools should never lose sight of the fact that there are necessary limitations on any scholastic program of professional training. The working organization of accounting firms is not uniform. Positions within the organization, methods of work, etc., differ considerably. No school can honestly undertake to turn out a product so trained as to fit without adjustment into a working organization. Certain types of instruction and the development of a proper mental attitude towards his job and his place in the work of the office can never be provided by a scholastic program. Some burden must necessarily be assumed by the profession itself in adjusting the product of the schools to the realities of practice. A laboratory course, such as has been developed at Columbia University, in which many of the realities of practical work are excellently simulated, goes a long way in relieving the profession of some of the burden of adjustment, but it cannot go the whole way.

It is probably apparent from the tone of this entire discussion that the program here developed is for training beyond high school. In my opinion, professional training for accountants will soon be placed on much the same basis as that of law and medicine. Just as two years of liberal arts college work is the minimum requirement for entrance to

professional schools of law and medicine, so in my opinion, should two years of such liberal arts work be set up as a prerequisite to entrance upon professional training courses for accountancy.

The program of study outlined above can conveniently be compassed within a period of three years training beyond the two years of liberal arts college work. I do not believe it possible to cover the necessary training in a shorter period than this five year period beyond high school graduation.

At the present time, educational standards of professional accountancy, as evidenced by the majority of state laws governing the practice of the certified public accountant, are extremely low, in view of the character and importance of the work which he is called upon to perform. This present standard places him at about the same level with nurses and veterinary physicians. So far as I know, the one exception to this is found in the State of New York, where, in accordance with the law now on the statute books, there will be required beginning on January 1, 1938, a certificate of graduation from a college of accountancy or school of business with a major in accounting. Under the regulations of the University of the State of New York, which is the educational department of the state, the certificate of graduation from such a school must indicate that the student has, in the period of his scholastic work, received the following specific credits, the unit of measurement being expressed in semester hours or credits:

Accounting	24
Economics	6
Business Law	8
Finance	8

Without such credentials no one after January 1, 1938, will be permitted to apply for the examination of certified public accountant in New York State. This is the beginning of an attempt to raise the educational standards of the accountancy profession to a level approaching those of the older professions.

When high educational standards are required before admission to the practice of public accountancy, it seems reasonable to expect that state boards of accountancy will give suitable recognition to such training by lessening the amount of practical experience required before or after admission to the examination, but always before the issuance of the certificate for certified public accountant. Many state boards do give such recognition at the present time, New York State, for example, granting two years experience equivalent against the five required for the certificate. I feel sure that with the establishment of suitable high-class schools for professional training, even greater recognition will be given. It is my opinion that properly selected students who have passed through such a course of training as is under contemplation in this paper should not need to serve an apprenticeship of more than one, or at the most, two years in an accountant's office to entitle them to the possession of the certified public accountant's certificate after passing the State Board examination.

The leaders of the profession are today becoming more and more concerned about the securing of the proper type of new personnel for replacements of present staff and executives, and for building up the staffs where expansion is necessary. They recognize that something more than mere technicians is required. While there probably will always be a place for men who are mainly technicians, more important work and particularly the work of direction must be in the hands of men with broad training, men who may be called business statesmen. It is necessary that such men be, in the first place, men of culture, able to meet business executives on their own level, both in business and socially. A broad knowledge of business in general and business practices in particular is increasingly a necessary qualification. Built on this foundation should be a broad technical knowledge of accountancy and its interrelationship with other fields of knowledge and endeavor, so that the future accountant will be well qualified to take his place with men of other professions, such as law, architecture, engineering, etc. Without this new type of personnel, and even until the need of it is more generally recognized among accountants,

accountancy will not take the place among the professions which is its due.

The selection of the proper type of student for professional training in accountancy requires careful consideration. It is always difficult to judge beforehand whether a student will be interested in professional study of this kind. It would seem that analytical ability is probably a prime essential. Combined with this must be some degree of mathematical proficiency. A real liking of figure work, a realization of the romance of human endeavor and effort back of the figures, a creative urge to show clearly the story expressed and summarized in figures, and an appreciation of form and orderly arrangement—all of these are qualities of mental make-up and attitude which will give promise of success in the accountancy profession. Other qualifications which are, of course, impossible of definite measurement are those qualities of mind and spirit which are characterized by such words as will-power, patience, thoroughgoingness, imagination, absolute honesty and honor, and common sense, which is not the least, by any means, of these qualifications. If such young men can be found or developed, the future of the profession of accountancy will be in capable hands.

COMMENTS BY WARREN W. NISSLEY

I have frequently heard discussions among accountants as to whether public accountants are engaged in a business or in a profession. The dictionary describes a profession as "the occupation, if not purely commercial, mechanical, agricultural, or the like to which one devotes one's self," while a business is called "any particular occupation or employment habitually engaged in, especially for livelihood or gain." It seems to me that the work of the public accountant falls within the definition of a profession and that it is also covered by that definition of a business. The same thing could be said of practically all of the occupations we are accustomed to refer to as professions. The original so-called learned professions were theology, medicine and law. There was a time when a real distinction could have been drawn between those engaged in these professions and business men because the professional man concentrated on service and looked upon whatever reward he obtained as more or less incidental, while a business man thought first of making a profit and incidentally rendered such service as he found necessary. This distinction, while it still exists to some extent, has been largely broken. Business men realize that, if they do not render a real service, they cannot make profits for long. On the other hand, while professional men still place as much emphasis as previously on the service feature, there is a quite natural insistence, even with respect to the original learned professions, that the hire of a practitioner is largely determined by his worthiness and, moreover, that he is entitled to his hire in advance if the client's credit is not good.

Regardless of what the accepted academic meaning, if there is one, of the word "profession" may be, when I use it in this discussion, I will mean a common occupation in which a group of practitioners are engaged. When I speak of professional education, I will refer to training for that particular common occupation. By the term common occupation, I will mean an occupation so limited that any one engaged in it at any time can, except for the inevitable differences in personal skill, readily perform the work of any other person engaged in it. This last feature is very important in my opinion, and is, in a nutshell, the reason I cannot subscribe to Professor Kester's opening sentence in which he says that, as used by him, professional accountancy means the vocation of accountancy whether practiced in the private or in the public field.

It is a matter of common experience with us that men can, at almost any time during their professional life—from the time that they are raw assistants up to and including the time when they are in practice on their own account—change their employment from the staff of one public accounting organization to that of another with satisfaction to themselves and to their employers. What little difficulty there now is in making

such a change will be largely overcome if professional schools are developed in which the basic technical training of our assistants will be more uniform that it can be by the apprentice method which, when all is said and done, is the method we must use today. On the other hand, it is exceedingly difficult for a man to change from private accounting employment to public practice, regardless of how successful he may have been in the former, and such a change becomes more difficult as the length of his experience in the private accounting field increases. There have been a good many public accountants who have entered private employment successfully, and a movement in this direction is certainly more logical than one in the opposite direction, but even so, many public accountants who have attempted to make such a change have also found it difficult or impossible to make the necessary readjustments.

I will admit that it can be shown that accountants in private employment use much of the same accounting technique as those in public practice, but I cannot admit that it is possible for men to change freely from work in one field to work in the other, and consequently I do not think we can consider the combined fields as constituting a common occupation. While technical considerations are a factor in this, I believe that a much more important factor is the substantial difference between the personal qualities that are necessary for success in the two fields. In short, the question of who you teach is more important than what you teach. It is because I do not think these two fields constitute a common occupation that I have become convinced, as I have stated elsewhere, that the establishment of professional schools which will consider training men for public accounting as their principal objective, is a vital necessity for the proper development of our profession in the future.

In addition to giving technical training, one of the important functions of the schools to which any profession looks for its new blood is the elimination, before graduation, of those men who are not likely to succeed in the profession. Under the present set up, under which public accountants must look to a very considerable number of Schools of Business Administration for new assistants with formal technical training, these schools do not perform this function—at least, they do not perform it in any manner that we can readily recognize. I doubt whether any of you would say that all of your graduates, or even a majority of them, are suitable for employment by us. To those of you who may feel that you can meet this issue by selecting the suitable men for us from any given lot of your graduates, I can only say that I do not believe that method will ever be satisfactory. It is bound to be done too casually and with selective standards that fluctuate too much from year to year and from place to place. It seems to me to be axiomatic that a particular objective is far more likely to be attained by design than by accident. Consequently, I do not believe that a particular institution will provide us with the type of men we want unless it adopts that objective as one of its important functions and concentrates on it.

If the public accountants expect the professional school to eliminate those not suitable for the profession, they must set standards to be used in the process of elimination. While I do not wish to pose as an expert in the selection of personnel, I have observed that the following qualifications are practically essential to success in public accountancy:

1. Exceptionally good health.
2. A pleasing personality.
3. A degree of excellence in accounting and analytical ability that can only be achieved by those who have a high degree of general mental power and who, in addition, have a natural aptitude for this type of work.
4. Common sense
5. Good judgment.
6. The ability to express ideas, particularly in writing, in a simple but thorough manner.
7. A character with the highest ethical standards.

I have tried to list these qualifications so

that the most elementary requisite comes first, and I believe that the ultimate success achieved by a man in public accounting depends, in a large measure, on how high he can measure up on this list. I might discuss each item briefly:

1. The work of a public accountant, particularly during the early years, is arduous physically. As long as most business concerns use a calendar year for their fiscal year, we must expect to put in long hours under extreme pressure of work during three or four months of the year. It is also necessary for us to perform our work in many different locations and it sometimes happens that the food is not of the best (although it is the general rule for our men who are traveling to live at the best hotels available) and, in any event, it is the product of many different cooks. Those who do not have a rugged constitution are under a severe physical handicap, particularly during their early years in the profession.

2. Our work concerns the intimate affairs of our clients, more probably than does that of lawyers and physicians. Moreover, in our case, it is frequently necessary for our assistants, who perform almost all of their work in the offices of our clients, to discuss these intimate details with the client. In law and in medicine, the principal can have almost all of the personal contact with clients and his assistants can be kept out of sight. The same thing holds true for junior accounting clerks in the private accounting field. If our assistants are not tactful in their discussions, and if the clients do not feel that they "are pleasant to be with" and "speak the same language" as they do, the reputation of the principal is bound to suffer. If, on the other hand, the assistant does not maintain a dignified and reasonably detached attitude in his dealings with the clients, the latter will lose their respect for the public accounting organization employing them.

3. Public accountancy is concerned with the language of figures although ordinarily it involves no difficult mathematical calculations. There is a general belief that one who does not like and who is not proficient in mathematics is not likely to succeed in public accountancy. I think that some research work on this subject might be very useful. A man without analytical ability is useless in public accountancy. An artistic type or one who approaches every task with the exuberant enthusiasm and optimism which is so necessary in a salesman, for example, is not likely to be successful as a public accountant. While it may be that they have been too much so, it is undoubtedly true that the successful accountants of the past have been of the deliberate and phlegmatic type and, so long as these qualities do not submerge all others, they are helpful. Needless to say, the better trained a man is in the technique of accountancy at the start, the more useful he is at the start. Since he will be engaged in using this technique every day, however, he will, of necessity, acquire additional proficiency as he goes along. When you are considering the subjects which should be covered by the education of a boy who plans to enter public accounting, it is well to bear in mind that, of all the qualifications I have named, accounting technique is the only one that must improve as a result of actual employment. There will, of course, be some improvement in the others, but largely, they are determined by natural qualities at birth, early environment and training, and by that of formal education, which is left after all of the facts learned in college have been forgotten.

4. A public accountant must have common sense so that he will be able to distinguish by intuition those business transactions which he must investigate carefully from those which he can pass with a brief scrutiny. If there are any among you who can tell me why it is that some persons have common sense and others do not, and what, if anything, can be done to develop the common sense of the latter, I promise to be a very attentive listener.

5. A public accountant is continually passing judgment as to the propriety of business transactions. An assistant can always ask his superior for advice, but once a man undertakes practice on his own account, his success is almost entirely de-

pendent on his judgment. Since good judgment as to a current problem involves weighing all the facts directly involved by themselves, and considering also their relation to relative factors, in order that one may arrive at a conclusion which will be in agreement with the conclusion that would be reached by a majority of intelligent men, experience is the best teacher in developing this quality. In addition to expressing opinions as to a present condition, it is becoming more and more necessary for accountants to express judgment as to the effect of present conditions on future events. For this form of judgment one should have a certain amount of well-controlled imagination—a quality in which public accountants are frequently weak.

6. Since public accountants have no forum in which to defend or explain what they have said in their reports, it is essential that they be able to state their findings in the first instance in a clear and concise, but nevertheless thorough, manner. If, as some of us fear, the new security acts result in "strike" suits by disgruntled security holders, it will be more necessary than ever that there be no loopholes or ambiguities in the English used in our reports. In that connection, it is our experience that men who have just graduated from college are frequently exceedingly weak in English composition.

7. The high ethical standards of public accountants are so generally taken for granted that I don't believe our profession receives all of the credit that is its due in this respect. I do not know of a case in which an accountant of any real standing has been convicted of deliberate and intentional dishonesty in connection with his work. While it is true that for a public accountant to perform his work dishonestly would be to commit vocational suicide, that is true of other professions and business activities also and it has not always acted as a deterrent with them. It is exceedingly important that this tradition should be carried on and that these high standards should be inculcated in our new blood. The professional schools have a serious duty to assist in this work.

I should like to go back now to my statement that different qualities are necessary for work in the private as compared with the public field. A man might be very useful in the private field who did not have exceptionally good health or a pleasing personality. Since the work is largely of a routine character, common sense and good judgment are not essential in any but the top executive positions. There is comparatively little occasion for careful use of the English language and while, of course, no one wants a deliberately dishonest employee, the accountant in private employ usually performs work for an employer with whom doubtful points can be discussed verbally, whereas the public accountant usually is responsible for drawing distinctions between right and wrong which must be reported in writing for use by persons whom he never sees or communicates with directly.

The process of eliminating the unfit must be continued during the course of study in the professional school. But if those schools are to serve the profession efficiently, they must reduce the wastage resulting from eliminating students who have taken up the time of the school to the absolute minimum by adopting standards for admission that will make it exceedingly difficult for the unfit to be admitted.

In closing, I want to make one point very clear. While I believe we need a new type of professional school for the profession of public accounting, I think the present Schools of Business Administration do an exceedingly good job in preparing men for that other, and much larger, profession composed of men who have employment in the accounting departments of particular business organizations. There is no reason why the program I am advocating, if it be adopted as I believe it will be, should detract in any way from the importance of the work now being done by you gentlemen in the present Schools of Business Administration. Moreover, such schools as I advocate should be established as separate departments granting distinctive degrees in certain of the existing institutions.

THE PROFESSIONAL COLLEGE

A. C. Littleton

There are three principal ingredients in the preparation for entering a profession: general education, special education and the education of practical experience. At various times and in different professions these ingredients have been tried in different combinations, always, I think, with the consciousness that every type of preparation is educational but with changing convictions regarding the best proportions and the most desirable sequences. In time, however, the emphasis in most professions has shifted from apprenticeship under a practitioner to systematic study under a professor. Only in the profession of public accountancy is practical experience still emphasized over formal education as the basis for admission to the professional examination.

For forty years a high-school education and three to five years of accounting experience have been the educational qualifications usually specified. And this has continued down to the present in spite of the fact that probably half of the recent candidates have had some college education and that present-day college courses in C.P.A. problems can give a broader training of analytical powers than a short experience as a junior accountant can hope to do.

It can hardly be claimed that the enforced practice prerequisites succeed in improving the preparation of the applicants, for a similar percentage of candidates, on the average pass the same test in states which require no experience as pass in states requiring three to five years of practice for admission to the examination. The practice requirement, therefore, must be a retained vestige of the past which was originally designed to insure maturity and at least some experience-education on the part of those who were admitted to this type of public service, and to offer the public some means of knowing which practitioners had met this test.

If the practice requirement is, as it seems, mainly a carry-over from a period when the absence of generally available means of higher education made some such practical substitute advisable for the protection of the public against inadequately trained men, and if now there is generally available, and widely used, an adequate educational machinery, then perhaps the time has come to rest admission to this professional examination, like the others, upon educational standards rather than professional practice.

But what educational prerequisites should be adopted for admission to the C.P.A. examinations? Numerous possible combinations come to mind.

In place of a high-school diploma and a specified period of practice, the requirement might be two years of general college work (perhaps even a college degree) and a period of practice. Another combination might be two years of general college work and three years in a school of professional accountancy, the latter in lieu of all or part of the practice requirement.

Both of these proposals have their advocates. But no one has thought to make out a case for the existing colleges of commerce. It would be quite logical in a profession so closely related to business, to require a college degree in commerce, with accountancy as a major subject, for admission to the examination—due reductions being made in the practice requirements, perhaps even to the extent of dropping them entirely for those with a master's degree in accountancy.

An excellent foundation already exists for this sort of requirement in the forty-seven universities included in the Association of Collegiate Schools of Business. At least one of these schools has been giving instruction for nearly half a century, several for at least a generation; many have included accounting as a major subject for the bachelor's degree for more than a decade, and not a few can give the student a full, five-year sequence of accounting instruction supported and strengthened by coördinate work

in economics, statistics, finance, and business.

There will be little disposition among accountants to question the need for re-examining the educational prerequisites for entering the profession and the means for providing that education. But there undoubtedly will be differences of opinion regarding the particular standard to be adopted at a given time and the best method of meeting the standards. For example, there is the specific question whether the next step in raising professional educational qualifications should be the establishment of separate professional schools of accountancy which require some general college education for admission, or the support and strengthening of the accounting departments of existing colleges of commerce.

Having watched for some time the development of colleges of commerce as an integral part of their respective universities, and noted with satisfaction the professional success of many graduates of the accounting departments of these colleges of commerce, I find a number of reasons coming to mind for doubting the need at this time for separating general education and professional education as seems implied in the proposals for professional accountancy colleges.

For one thing, the profession throughout the country has not yet made an adequate test of the existing programs of accounting instruction or a thorough trial of graduates of colleges of commerce with an accounting major. Too often in taking commerce graduates into the staff, little or no attention is paid to scholarship records as a clue to aptitude and the ability to learn; occasionally personality and college activities are allowed to out-weigh the evidence of a thorough foundation in collateral subjects. Practitioners could provide an immediate and powerful stimulus to better educational preparation for accountancy if they would pledge themselves for a period of years to absorb the scholastic upper fifty per cent of the accountancy graduates of the colleges of commerce having a satisfactory accounting program.

Furthermore, we are hardly ready for separate schools of accountancy with a high degree of specialization because the literature and teaching materials are still inadequate to support a three-year program in accountancy alone.[1] As a result of this shortage one of two things would happen in a professional school. Either collateral and related subject matter, such as economics, finance, law, and business administration, would be added to the work in accountancy in desirable amounts—in which case the school would practically duplicate the present offerings of the college of commerce—or the school would be led into a degree of over-specialization that might result in a excessive drilling for the development of mere skills in the technique of the work of junior assistant—hardly a suitable function for a university professional school which should train men for later professional life as well as for the beginning of their careers.

Practitioners cannot hope ever to be able to transfer all responsibility to schools for training staff members even if active practitioners make up the whole faculty. No school, academic or professional, can hope to reproduce faithfully the pressure of actual engagements, the diversity of situations, or the overwhelming mass of transactions; no system of study can train men, as one accountant has said, "to remain alert after having reviewed ten thousand legitimate entries," or teach them to supervise a crew of assistants effectively. There is much skill and judgment that only later experience, after any education you say, can bring into existence.

Grant that most commerce schools do not now do as much as they could or should in laying a foundation for good professional technique. That can be remedied. But the schools must look to the practitioner to supply the teaching materials; and the practitioner must always expect to guide the novice at one time or another through his professional initiation of real experience whatever his prior education.

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[1] "The total volume of technical literature is not large. Indeed, the amount that is outstanding or even good enough to be put in type is regrettably small." Editorial, *The Journal of Accountancy*, March, 1936.

Another reason for doubt is the thought that the ideal of a professional school manned by practitioners is too often impossible of realization because of the difficulty men find in serving two masters equally well. Teaching is a profession with problems and techniques of its own just as auditing is. The problem of professional education is not to be solved by a school of professional teachers alone or by a faculty of professional practitioners; the real problem is to find practitioners with a fine sense of the problems of teaching so that they will produce a steady flow of good teaching materials, and to find teachers with such a clear perception of the problems of practice that their students will always have their feet on the ground of realities.

An additional reason. One of the principal qualities desired in a professional man is physical and intellectual maturity. But the layer-system, wherein professional education is superimposed upon a general education, is not the only way to gain that maturity. A mixture of both elements throughout the educational period can also accomplish this result. In fact, this was the early ideal in medical and legal education, but there it proved impracticable, even though desirable, largely because of the tremendous growth of teaching materials. Even if four years of college and five years of medicine, or four of college and three of law, are considered highly desirable, only a relatively small number can afford the cost of long training or the sacrifice of waiting to reach the stage of earning a living. Time for most people is not unlimited.

These considerations become practical matters when weighing the merits of possible combinations of educational programs in accountancy. Can enough desirable candidates be found who can give four years to general education and three to accountancy? We would probably be forced to turn to two years of general education and three of professional courses. When a man enters the profession with that background, how much better trained—or intellectually matured in his field—will he be than the man who had four years in a commerce college providing three or four years work in accounting and well-coördinated collateral courses in economics and finance?

And if the commerce graduate with an accounting major should add a year or two of graduate work, he will have spent a maximum of six years against seven for the graduate of a professional accountancy school who entered with a general college degree. The commerce graduate will have spread his study of accountancy over five or perhaps six years as compared with three years for the other man; his accountancy will have been carefully graded in sequence and paralleled with coördinate subject matter related to business. Training in one subject alone is not the most desirable type of professional education. What the sciences of physics, chemistry, and biology are to medicine, economics, finance, and business are to accountancy. Training in accountancy without adequate work in the related subjects is as incongruous as medicine without chemistry.

In urging separate professional schools for accountancy with a general education prerequisite, one is tempted to reason by analogy from the example of the law school and medical school. Law and medicine, the argument runs, are professions and the subject matter of these professions is now taught in separate professional schools with a general education prerequisite of at least two years. Accountancy is also a profession; therefore, its subject matter should likewise be taught in separate professional schools following a general education. But reasoning by analogy is often fallacious when the cases are not strictly analogous. If accountancy is not directly comparable to law or medicine in certain important particulars, it will be difficult to conclude that their educational organizations would be equally suitable for accountancy.

It may be worth while, therefore, to inquire why medicine and law are now taught in separate colleges, and, as an antecedent to that question, why the apprentice system of preparation for these professions was abandoned in favor of preparation in an educational institution.

Medicine and surgery probably have the most exacting educational standards of any profession today. But their early background was far different. For centuries medical education consisted mainly of theoretical expositions of the traditional authorities, until the nineteenth century conducted in Latin. On the Continent the doctor's degree was purely scholastic; the graduate then joined the retinue of a practitioner to gain experience as if an apprentice. In England the medical student was frankly an apprentice to private physicians and "walked" the wards with the latter as an assistant being initiated into the mysteries of a craft. In fact, it was nearly the last half of the nineteenth century before apprenticeship was regarded as antiquated, and the "learned physician," steeped in the dogmatism of semi-literary medical authorities, had abandoned meditation for experiment.[2]

What then brought about the substitution of formal education for apprenticeship? It was the revolt among thoughtful men against scholasticism which searched authorities for its pronouncements, and their growing preference for science which relied upon experimentation for guidance. It was the abandonment of philosophy, dogmatism, and deductive argumentation as the accepted educational processes, and the acceptance of efficient apparatus, cautious experiment, technical skill, and the inductive search for basic facts and causes.

The spirit of the scientific revolution broke down the old system. Integration of the sciences increased at the same time that the sciences were separating into special fields. The teacher became more than a journeyman practitioner; the organized sciences became the indispensable basis of medical knowledge; the student became more than the pupil of a master; he studied in many laboratories, under many specialists, learning to *know*.

Legal education for a long time also rested upon the apprentice system; now preparation for the profession is definitely centered in schools. Why has this change come about?

[2] See Carnegie Foundation for the Advancement of Teaching, Bulletins No. 4 and No. 6.

In eighteenth-century England there was no institutional instruction to prepare lawyers for their professional activities. Entrance into the profession was not very far removed from craft-guild methods, for it involved an article clerkship of five years to an attorney at the Inns of Court, followed by an examination by a judge which "seems to have been purely perfunctory."

In the United States during the eighteenth and early nineteenth centuries the student read law in a private office. After a period of apprenticeship of such length as the individual attorney decided, the applicant for admission to the bar was vouched for by a member and accepted by the court. Gradually the law offices which were most successful with their students became private schools staffed with practitioners who had shown teaching ability. Equally gradually it became the custom to select examining committees to represent the whole bar in checking the judgment of the individual preceptor regarding the candidates' preparation. Later the courts or the legislatures intervened to guide and assist the profession in its problems of controlling admission to the bar; that is, the state determined the period of apprenticeship and organized the examination system. Thus there were two types of educational tests. In some states the candidate could choose his mode of entrance, but soon it became customary to require both tests.

At that point the reaction of a new and democratic country began to show itself: there was a tendency to drop or forbid an apprenticeship, thus leaving the examination to stand alone, or there was a failure to set up adequate examination machinery—such as the casual designation of lawyers present to act as an examination committee. Both of these tendencies fostered the substitution of an independent examination conducted by the state itself in place of the examination by a committee of the profession and the required contact with office practice. The state examination thus came to be considered as a sufficient test in itself.

Two factors, then, tend to explain why legal education moved from the practi-

tioner's office into educational institutions. One was the growth of a body of men especially skilled in teaching law. The other was the philosophy that a democratic state was the supreme governing entity and should itself, therefore, set the standards for admission to governmental service—since the attorney was an officer of the courts of justice, and since the practice of law was the principal avenue of approach to legislative bodies and political office. The older system was less democratic than feudalistic in mold since there the relationship ran from the individual to the guild (professional brethren) rather than directly to the state (society as a whole.).[3]

Since the best preparation for a written examination was study under men skilled in teaching, and since such men congregated in educational institutions, there the prospective lawyer went.

Some explanations have been given above for the replacement of the apprentice system by study in educational institutions. But little has been said that would explain why this relocation of educational responsibility developed separate professional schools with general educational prerequisites. Conceivably, legal and medical studies could be pursued concurrently with general subjects. And few would dispute that students of law would benefit from the concurrent study of history, political science, economics, and even accountancy and finance, or that the study of medicine should go hand in hand with science. Yet the mixture of general and professional education has been abandoned in medicine and law. There must have been reasons for the trend; and if the same reasons appear in connection with accountancy, they would equally well support the proposition to place accountancy instruction on the same basis as law. But if the same reasons do not exist in accountancy, the analogy to law and medicine would not hold.

The reason that law is given in a separate school is not because the school is professional in purpose, but because the enormous growth in the quantity and complexity of legal materials and problems has left no alternative. Lawyers and law teachers are not unaware of the advantages of coördinated education, but they also realize that an adequate foundation in the law's great complexities and in the method of attack upon its multitude of problems can only follow from an extended concentration upon its own material. In fact, they could make a strong case for extending even beyond three years the specialized study of technical law. Under these conditions it would be unwise to dilute the study of law with the concurrent general studies, or to prescribe a long period of preliminary education. A practical balance must be made between the most comprehensive general and technical education, and the necessity for men to enter active practice early enough to survive those beneficial first years of struggle. (Bulletin No. 21, p. 139.) Law school work is, therefore, narrowly specialized by necessity rather than choice.

The reason for the separate college of medicine is similar. It needs no demonstration to convince us that the subject matter and problems of medicine, like those of law, have increased very greatly in quantity and complexity. This has been inevitable in view of the rapid strides made in pure science during the last generation or two. Separate medical schools are the result. (Bulletin No. 6, p. 8.)

For the same reason the medical schools prescribe a preliminary education in the basic sciences of biology, chemistry, and physics. So much of the medical student's later work is laboratory science that a preliminary knowledge of science and scientific methods is regarded as indispensable to good work in advanced classes. In a word, there is a high degree of continuity and necessary sequence in pre-medical courses and the later courses in the professional school.

The same cannot be said, however, regarding the relation of pre-law work to law courses. Recommendations for pre-law general education include history, political science, and economics, as constituting excellent preparation for later life as an attor-

[3] See Carnegie Foundation for the Advancement of Teaching, Bulletins No. 15 and No. 21.

ney. Pre-law studies are not, like pre-medical courses, a preliminary training which is necessary in order that the student may benefit by the studies to follow.

The next question then is whether accountancy is sufficiently analogous to medicine and law that the same type of educational system would be equally logical for the newer profession. It seems that the answer at this time must be in the negative.

The apprentice system has outlived its usefulness in medicine and law because of the development of organized teaching materials and experienced teachers. For the same reasons it is no longer necessary in accountancy to look exclusively to practical experience plus private reading for preliminary professional education. This condition, therefore, may be regarded as a sign that the time has come to change the basis of admission to the C.P.A. examination from a practice requirement to an educational requirement.

But it does not necessarily follow that the time has also come to look upon separate professional accounting schools as the standard. The pressure of a vast growth in the quantity and complexity of materials has forced medicine and law into schools of specialization under teachers who are also specialists. But there is no comparable pressure in accountancy of accumulated special subject matter or of the subdivision of specialties.

Consider, for example, the quantity of accounting literature available for teaching purposes in comparison with the vast literature of either law or medicine. An analysis of the American publications on accounting listed in Bentley's *Bibliography* reveals only a meager professional literature. From 1919 to 1934 about one-third of the classified titles referred to cost accounting (94 items), and two-thirds to general accounting (171 items). For the past thirty years there were, in addition to the above, thirty-five pages of titles about specialized costs, fifty-two pages for uniform systems for industry, and twenty-five pages of references to uniform systems for public utilities and railroads. In these rapidly moving times much of this must be quite out of date. In the eighteen years 1917 to 1934 inclusive, there were published seven books on corporation accounting, thirteen on accounting problems, fifteen on special accounting topics, forty-three on general principles and practices, and five which might be called miscellaneous—a total of eighty-two volumes, many of them now over ten years old. Even if twenty-seven pamphlets of less than one hundred and twenty-five pages which might include material on higher accounting are added, the list is far from impressive. It can hardly be said to indicate a rapid and extensive accumulation of complex knowledge. There is no material there which must necessarily be presented in a separate professional school of accountancy; any of it could be presented in the accounting departments of the colleges of commerce.

And few will claim that accounting technique is such as to require a separate professional school to teach it. Indeed one experienced public accountant has said in a meeting of the American Institute "Accountancy has thus far accumulated little technique. . . . " (*Journal of Accountancy*, November, 1935).

If there is no large body of technical literature needing the interpretation of specialists, and if there is no extensive or complicated technique in accounting to be laboriously translated into skills, then it must be clear that the same forces which produced separate law schools and medical colleges are not at present urging accountancy in the same direction.

It is generally assumed that medical colleges and law schools accept any general educational program for admission to the specialized professional work. This is essentially true for law schools, where it is considered unnecessary to exercise much control over the choice of subjects offered for admission. If an accountancy school were to follow the law school precedent, any scheme of general college education would be acceptable for admission. There is probably a place for a few schools of that kind to meet the needs of men who make their choice of a career late in their educational program.

The same reasoning is the justification for schools of business which admit students on the basis of a prior degree in general education. In neither case, however, is the implication acceptable that such an arrangement is the only, or the best, training for a profession.

On the other hand, the medical schools prescribe so much science for admission that pre-medical curricula hardly constitute a "general education." A man who wants the best medical training is almost under the necessity of choosing his career upon entering college. If we were intent upon selecting that program most likely to produce the best trained men to enter professional accountancy, the medical requirements would seem to offer the better model. In that case, admission to a professional school of accountancy would require prior education in economics and business, including a considerable amount of general accounting.

In the transition from training in a craft to education for a profession, there seem to be certain stages to be passed. Medicine and law have made the full transition. Engineering is approaching the stage where conditions are pressing for a separate professional school resting upon a pre-engineering education including mathematics, science, and laboratory. But accountancy is still far from experiencing the same formative pressures. Some day, when the teaching materials at hand are vastly increased in comparison to the present, and when accounting technique has grown deeply complicated, or professional responsibilities and professional independence have been materially broadened, then perhaps separate accounting schools may become the standard. But even then, the preliminary education should contain a substantial amount of commerce subjects (fifty per cent?), for accounting must always rest upon economics and business as medicine and engineering rest upon science.

Until that expansion has taken place the advancement of the profession would seem to require that the methods of educational training already available as preparation for the profession should not be neglected—that is the work for a major in accountancy in a university college of commerce, where professional accounting is taught, or can be taught, in conjunction with indispensable collateral courses in general accounting, business administration, statistical methodology, corporation law, business finance, investment analysis. An extended education in financial-statement preparation and audit procedure outside the circle of such related collateral studies may perhaps produce well-trained junior assistants and semi-seniors, but it is doubtful whether it would lay the best educational foundation for developing the leadership which the profession of the future must have to bring accountancy into its full destiny.

While an occasional separate accountancy school is being formed to meet the needs of men desiring to supplement the work of a general college degree with a concentrated study of accountancy alone, it would be beneficial to the profession to give constructive criticism and tangible support to the professional accounting work being given in the university colleges of commerce. With that in mind the following proposals are advanced as methods by which the profession can exert a steady pressure for improved educational preparation.

1. That practitioners, while giving due consideration to scholastic records in individual cases, make a consistent and concerted trial of the graduates (bachelors and masters in accounting) of the university colleges of commerce where adequate instruction is also given in closely related subjects.

2. That other state societies follow the example of the New York Society in securing the amendment of their C.P.A. law to make a college education in business a prerequisite for admission to the professional examination.

3. That state societies secure amendments to permit the separation of the examination into two parts, the first to cover accounting theory, commercial law, and business finance, and to be open to anyone with a bachelor's degree in an accounting major from a university college of commerce (without practical accounting experience). The second, consisting of professional auditing

and practical problems, to be open only to those who have passed the prior examination and who have had two years of satisfactory practical experience in a public accountant's office (post-graduate work in accountancy to count as one year of this experience).[4]

4. That a joint committee be formed from nominations by the American Institute of Accountants, the American Society of Certified Public Accountants, and the American Accounting Association with the following objectives:

(a) To design a system of standards by which to judge the merits of the educational opportunities currently offered by colleges and universities for a career of professional accountancy.

(b) To make a rating, based on these standards, of any school asking for that service.

(c) To consult with individual schools upon their request, and to coöperate with the Association of Collegiate Schools of Business in connection with questions related to improvements in professional education.

This method of furnishing a guide to educational institutions and an incentive toward specific improvement is not without precedent. The work of the American Bar Association and the American Medical Association in inspiring improved educational facilities is well known. The methods of building a set of standards have been worked out by universities and rating associations in connection with the interchange of credits for transfer students and could be easily adapted to the present proposal. Among other elements the rating base would, no doubt, give due weight to the education and practical experience of the teachers offering work beyond the elementary courses, to the number and types of advanced courses offered in accounting and closely allied collateral subjects, and to the success of the school's graduates in the prior five years.

Wherever the examination laws raised the educational qualifications, state C.P.A. boards would undoubtedly find such a service of impartial ratings of considerable value to them when making up their lists of schools whose degrees would admit to the examinations.

[4] As an alternative, if the separation of the examination into two sections seems inadvisable, all candidates could be required to have had at least two years of college, general or commerce, and three years of prior experience in a public accountant's office, provided that a graduate with an accounting major in a recognized university college of commerce and a scholastic standing in the upper fifty per cent of his class, should be admitted to the examination without prior practical experience. If it should seem desirable, all candidates who were successful in the examination under these conditions could be required to offer two additional years of satisfactory experience, acquired before or after the examination, before the certificate would be delivered and the right granted to use the title Certified Public Accountant. This plan may be compared with the medical requirement of collegiate training, examination, and interneship.

BUDGETING IN RELATION TO STANDARD COSTS

J. G. Blocker

During the past fifteen years cost accounting methodology has been revolutionized, many existing accounting systems have been renovated, cost accounting literature has been flooded, and speeches on subjects of costs have been electrified by the apparent "magic" of the new managerial device known as "standards" or "standard costs." Especially in the manufacturing division of concerns, where planning of productive activity has reached a high degree of perfection, careful routing, scheduling and standard processing have been supplemented by the use of standards which permit managerial control at every stage of manufacture.

The use of standards is not a newly created device. The underlying principles have been a part of the efficiency plans of engineers in plants for many years, especially in setting piece-work labor rates through the aid of time and motion studies. Likewise, sales quotas, advertising appropriations, and allotments for various classes of expenses may be classed as a type of standard which has been used to measure efficiency in sales and administration divisions of many concerns. Even cost accountants have used standards in the older type of job-order system in disposing of overhead expenses through the development of a general overhead distribution rate or departmental rates, the purpose being to avoid seasonal and cyclical fluctuations in costs by charging standard or normal overhead to production.

The new era of popularity of standard costs has been due to the success with which standardization has been applied to all the elements of a business. Management has come to realize the economy of both time and effort in the use of the "principle of exception" which underlies the use of standards. It is assumed that actual performance which meets the standard set is satisfactory and only those activities which fail to come up to standard performance receive executive attention. The setting of standards is valuable to the management in price determination, in the elimination of abnormalities in material, labor, and overhead expenses and in comparing the operating efficiency of workers, foremen, and even executives.

Standard costs are not distinct systems of accounting. They may be used either with the process or operation type or with the job-order or specific-order type of system. Standard costs may be developed and put into operation step by step for the various items of cost. They may be developed for sales and advertising or materials or labor or overhead, or for all elements of cost, the value of the system usually increasing in proportion as more costs are standardized.

BUDGETS AND STANDARDS

Standard costs have been ably discussed from both a managerial and accounting point of view in current books and magazines and no attempt will be made in this treatise to elucidate the advantages or accounting techniques.[1] One important consideration, however, has not been given adequate attention in any of the writings concerning standard costs. The part that budgets and a system of budgetary control play in the development and operation of standard costs is important enough to deserve careful consideration. In fact, the statement can safely be made that budgeting must precede the accurate and effective determination of standard costs, at least as far as price standards of material, labor, and overhead are concerned, and conversely, a plan of budgetary control is much more successfully installed in concerns having standardized production processes and operating under standard-cost-accounting systems. Budgetary control and standard costs are inseparable and are each a necessary adjunct of managerial planning.

[1] See especially bulletin on *Cost Accounting Through the Use of Standards*, Department of Manufacture, Chamber of Commerce of the United States, 1931.

DEFINITION OF STANDARDS

Readers of current texts and magazine articles will be confused by the lack of uniformity or agreement as to what standards are and the methods used in their determination. The following definitions, taken from current books and periodicals, illustrate the existing confusion as to the meaning of standard costs and show the need for some uniform method of determining standards.

> Standard costs are estimated costs which are believed to represent ideal conditions to which it is hoped that actual costs may be made to conform. Standard costs are neither actual, average, nor normal costs, but are estimates of what costs should be under as nearly perfect conditions as it is possible to secure.[2]

> Standard costs may, therefore, be defined as representing a forecast of what costs should be under normal conditions, and as furnishing a basis for measuring productive efficiency.[3]

> We view standards essentially as a unit of measurement; some reasonably attainable expectation of performance by which we are to judge or control actual performance as it happens.[4]

> Such a system is one which employs predetermined figures in the accounting in place of actual costs of production. . . . A standard cost of an article is the anticipated or desired cost of that article under certain specified conditions. . . . Standard costs are of several kinds of which the following are illustrations: normal cost, replacement cost, budget cost, estimate cost.[5]

Out of this maze of conflicting concepts may be extracted the important principles that standards are predetermined costs and are used as a basis of comparison with actual costs. Standard costs are not permanent costs and are subject to revision from time to time. They may be characterized as "common sense costs" which reflect the best judgment of management as to what costs ought to be if the plant were operated with a high degree of efficiency with the standards for material, labor, and overhead set so as to be possible of attainment. A definition will be ventured.

The standard cost of a product may be defined as a schedule of estimated costs which is based upon definite engineering specifications for quantity standards and forecasts of future market trends for price standards, with a fixed allowance, expressed in dollars for labor, material and overhead, for an estimated quantity of production or sales for each phase of activity during a definite period of time.

The important thing that should be noted before a detailed analysis can be made of the proper method of determining standards is that there are two groups of standards: price standards and quantity standards and for each element of expense, whether material or labor or burden, the "variance" between standard and actual at the end of each accounting period is explained by price differences and quantity differences.

Mr. Maynard summarizes these differences tersely by his schedule.[6]

	Price Variance	Quantity Variance
Material	Purchase loss and gain	Manufacturing loss and gain.
Labor	Difference between standard and actual wage rates.	Operators' efficiency.
Burden	Expense variance.	Machine efficiency. Cost of idle facilities.

The determination of price standards is predicated on the idea that market prices for materials, labor and indirect services, classed as overhead, can be forecasted for the ensuing period and that the required quantities of these requirements can also be foretold. Therefore, carefully prepared budgets form a necessary element in the preparation of such standards. The determination of quantity and time standards is largely an engineering problem in which budgets are only indirectly of value in supplying estimates of the quantity of goods expected to be produced. In the succeeding section the part that budgets play in the setting of

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[2] W. B. Lawrence, *Cost Accounting*, 1930, p. 376.

[3] L. C. Amidon and T. Lang, *Essentials of Cost Accounting*, 1928, p. 270.

[4] *How To Set Standards*, National Association of Cost Accountants, p. 47.

[5] *Cost Accounting Through the Use of Standards*, Department of Manufacture, Chamber of Commerce of the United States, 1931, p. 16.

[6] H. W. Maynard, "The Accounting Technique for Standard Costs." *National Association of Cost Accountants Bulletin*, February 15, 1927, p. 546.

different types of standards will be discussed in detail.

STANDARDS FOR MATERIALS: QUANTITY

In the case of material the goal is to set a standard material cost per unit involving a complete list of the material used, with the standard quantity multiplied by the standard price of each part. The determination of quantity standards has been ably discussed in both texts and periodical literature,[7] so that only a few of the principles involved need be discussed here. Apparently, it is quantity standards which writers have in mind when they consider standards of a fixed and unchanging character. Material-quantity standards are based upon engineering specifications, verified by chemical and mechanical analyses, or by "test runs." H. J. Myers, Comptroller, U. S. Radio and Television Company, describes the process of obtaining quantity standards for materials tersely:[8]

> Standards of material should be based on the quantity of pieces, pounds, feet, yards, etc., required to make the article desired and should include normal waste. It should not include allowances for poor material, or for carelessness in handling or workmanship which would cause an undue amount of loss of material, because it is these things that we want a standard to show up. . . . Standards should not be based on past performance but on an analysis of the product and what it requires. Variations from these requirements should show up regularly as variances from standard. . . . There are some materials for which it is not easy to determine standards, such as plating materials, finishing materials, etc. . . . When determining a standard for some of these difficult materials do not determine the quantity used per piece processed, but rather determine the quantity used per square foot of surface, per pound or some common unit of measure. Then the standard quantity required for that material can be determined mathematically per piece processed thereafter.

Quantity standards, when carefully and correctly set, should remain unchanged as bases of measuring efficiency until there has been a change in the quality of material used, a new invention, or a variation in the method of production. There are no budget elements involved in setting such standards and the problem is largely one of engineering rather than of management.

STANDARDS FOR MATERIALS: PRICE

The determination of price standards for material is distinctly a different problem, one which is based upon executive judgment, fortified by a system of budgetary control and forecasting.

Myers states, "A standard price should not be changed unless some discovery, new invention, or method will assure a permanent reduction in the market price of a commodity."[9]

Neither this conception nor Lawrence's definition[10] that standards "are estimates of what costs should be under as nearly perfect conditions as it is possible to secure," seem logical or practical in the case of material price standards. Material prices are constantly fluctuating to a marked degree even in the case of standard products such as steel, copper, and lumber and to use a standard price for materials which is above or below the actual market prices period after period seems to be a most confusing and unreliable barometer of costs. Likewise, to set fictitious prices, considered as a goal or an ideal price standard, seems even more ridiculous.

A more practical solution to the problem of setting price standards for material is to consider the present prices of various grades of material, the economies realizable by quantity buying, and the probable market tendencies for a definite future period of time, in most cases the budget period. The standard material prices would be changed at the beginning of each period to coincide with the estimated requirements and market conditions for the ensuing period and the predetermined standards would remain in force for the entire period. The standards should be based upon the most efficient conditions of purchasing, transportation, and

[7] See especially *How To Set Standards*, National Association of Cost Accountants, 1931.
[8] Ibid., pp. 3–5.

[9] Ibid., p. 6.
[10] W. B. Lawrence, *Cost Accounting*, 1930, p. 376.

handling, but they should be within the possibilities of attainment.

The standard cost of material should include the price paid to the vendor, after deducting both trade and purchase discounts, to which should be added freight charges, cartage, receiving and testing costs, insurance, and storage charges. While impractical in many concerns, it seems logical to include the costs of the purchasing department as a cost of materials. In other words the price of the material should include all costs incurred up to the time the material is ready to be put into manufacturing processes.

Conditions vary in different companies, but two distinct groups of raw materials are usually purchased. One group includes semi-processed or completed parts which are either further processed or used in assemblies in the finishing departments. These parts are purchased according to standard specifications. They are contracted for some time in advance and usually are not susceptible to current market price changes. The production budget would exhibit the expected production of finished products, broken down by units and classes of products for the budget period. These estimates, combined with the standard material requirements for each unit of the product, would give the purchasing department adequate information as to the quantity of each class of material needed for the budget period.

If materials are contracted for in advance of the budget period, as is often the case with parts made according to specification, the actual contract price per unit plus an estimated amount of freight, receiving, handling, storage, and purchasing cost should constitute the standard price of each unit of material for the period. To obtain the estimated amount of these various charges for the period, the management should resort to manufacturing expense budgets for estimates of freight in, cartage, receiving, uncrating, counting, testing, storage, insurance on the goods, and perhaps purchasing department costs. The total amount of the estimates should be divided by the total number of units to be purchased or by the total contract price, less trade and cash discounts, to obtain the estimated amount of handling charge to be applied to each unit or dollar of purchase. This amount added to the unit price would constitute the standard unit price for the period. In many cases the purchase requirements of this class of materials will be so varied that the number of units will be an impractical basis for the application of the receiving and handling charges and the value of the purchases in terms of dollars will have to be resorted to. A hypothetical case will make the method more easily understood.

It may be assumed that the X Manufacturing Company uses 50 different classes of parts which are purchased in completed form, ready for assembly, from other companies. Definite price contracts are entered into for the six months' budget period for this class of material at a total net cost of $24,000, trade and cash discounts having been deducted. The expense budgets show estimates for these purchases for the period as follows: freight in, $400; cartage, $50; receiving department costs, $200; storage, $50; insurance, $25; and purchasing department costs, $475. Using the contract cost of the material as a basis, the formula would be:

$$\frac{\text{Estimated receiving and handling charges for budget period}}{\text{Cost of materials for the period (contract price)}}$$

$$=\frac{\$1200}{\$24{,}000}=5\%$$

the amount to be applied to each dollar of purchase. Therefore, if casting number 2056 had a contract price of $1.00 per unit, 5 cents would be added for receiving, handling and purchasing cost. The standard price for the part for the budget period would be $1.05.

If materials in this class were not contracted for in advance, the quantity requirements could be obtained from the production and purchasing budget, and since market price fluctuations are not common to materials in the group, existing price lists could probably be resorted to for price estimates for the budget period. The same procedure of applying receiving, handling, and purchasing costs to the material could be followed except the denominator in the formula would be "estimated cost of material for the

period" instead of the actual, contract cost.

The preparation of standard cost prices presents greater difficulties in the case of materials in the second group. The group includes standard raw materials that can be bought in the open market and which are susceptible to almost daily fluctuations in market prices. The same general method may be followed as in the other class of materials, but the determination of the estimated prices for the materials to be purchased will require a more careful and elaborate analysis.

Mr. Myers writes[11] that materials in this class "should be built up by an analysis of the market for some period past. This period should cover at least one complete business cycle and longer if possible. The average price should be established as standard." The rapid price changes, which have been typical of the market conditions during the past four years, indicate the inadequacy of Mr. Myer's method of using market prices of past periods. Instead a careful analysis should be made by the forecasting and purchasing departments of the existing market conditions and the expected trend of market prices during the next budget period. It may be that a series of expected prices, either upward or downward or perhaps in both directions, may be built up in which case the average of the estimated net prices for each class of purchases should be established as a standard to which could be added, in the manner given above, the applied receiving, handling, and purchasing cost to obtain the final standard for the period. The standard price for each class of materials should be used, without revision, during the budget period and longer if market prices, receiving, handling and purchasing costs have not changed appreciably.

Accounting plans for the control of standard costs through the accounts in the general ledger, supporting subsidiary records, and the disposition of variances have been ably discussed in current texts and periodicals so no detailed discussion will be undertaken in this treatise.[12] However, if the method suggested above of establishing material price standards is adopted, the raw materials and parts accounts should be shown at the actual purchase price. If the stores were priced at standard, it would be necessary to change the pricing each budget period when a new set of price standards was adopted. Stores should be kept at actual and requisitions used to transfer material from stores to work-in-process could be priced at standard, the variance being computed between the stores and work-in-process accounts. Another method would be to recognize the variance when the goods were transferred from the work-in-process to the finished goods account.

STANDARDS FOR LABOR: TIME

The problem in establishing standard labor costs is to develop a schedule or standard cost sheet for each product manufactured, showing the standard time for each operation multiplied by the standard rate per hour to be paid.

The determination of efficient standards has progressed to a higher degree of success in the case of direct labor than in either material or overhead because of time- and motion-study methods, minute division of labor, and scientific wage schemes in manufacturing plants. It has been estimated[13] that while the cost of organizing an efficient time-study department and the measuring of labor efficiency through time studies may amount to 4% or 5% of the direct-labor costs, the productive output of workmen is commonly increased from 50% to 75%. Those familiar with piece-work wage systems will readily understand the methods of setting standard time requirements for direct labor. Time and motion studies by means of a stop-watch is usually the most common method followed. Myers suggests two ways of setting standards by means of the time-study method:[14]

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[11] *How to Set Standards*, National Association of Cost Accountants, 1931, p. 6.

[12] See especially *Cost Accounting Through the Use of Standards*, Department of Manufacture, Chamber of Commerce of the United States, 1931, pp. 26–33.

[13] A. W. Bass, "Modern Trends in Cost Accounting," *National Association of Cost Accountants Bulletin*, August 15, 1931, p. 1902.

[14] H. J. Myers, *How To Set Standards*, National Association of Cost Accountants, 1931, p. 8.

The common way of approaching and doing time study is from the viewpoint of the time required to perform all operations in making a definite part, subassembly or assembly. The other way is the time required to perform definite elementary operations, processes, etc. Once standard times are determined, recorded, charted, plotted, or worked up in formulae, a standard time per piece part can be determined mathematically.

Regardless of the method, the basis of determining labor-time standards must be fair to both the employees and the company. It should not set a goal which cannot be reached, but should be reasonable and attainable. When a labor time standard is correctly set it should remain in use until changes occur in the method of performing the operation or until the quality or time of labor used is changed. The setting of such standards has no budgeting requirements, so no detailed analysis is necessary.

STANDARDS FOR LABOR: PRICE (LABOR RATES)

Standard time requirements are being adequately studied and established in the majority of manufacturing concerns; it is in the matter of direct-labor pricing that more uniform and efficient methods of standard determination are necessary.

Unfortunately, the most customary procedure in obtaining labor rates for use as standards has been to select either the rates paid during past periods for each class of labor or to set standards as to what the management considered the rates should be. The standards obtained by either method would be unreliable and inaccurate. Labor rates are prices which are determined in a competitive market in which the factors of supply and demand are usually active and constantly changing in relationship to each other.

If price standards are to be of any value to management as a guide to future operations and profits, they must adhere as closely as possible to the actual prices which will be in existence during the next period. In regard to the price standards for labor, rates should be accepted which are likely to prevail during the budget period. In some industries, such as the clothing trades, wage rates are agreed upon by contract between the unions and the management of the various companies for many months in advance. In cases where the wage rates are relatively fixed, the contract wage rate or agreed-to piece-work rate may be used as the standard for the period of the agreement.

In most cases, however, wage rates are highly competitive and the labor market changes from month to month. In setting labor standards for this type of labor, a careful survey of the labor conditions within the company and in both local and national labor markets is necessary. The labor budget should show the labor requirements for each class of labor for the budget period. The conditions underlying each class of labor in the local market should be analyzed and the expected changes charted or taken into consideration. The probable influences of a national character should next be brought into the picture and correlated with the intercompany and local conditions. The forecasted wage rates and their period of existence should be averaged, the resulting rates being considered the standard for the budget period. The standard rates, once determined, should be used without change for the period of the budget, any difference more or less than standard being considered as a variance. Labor price standards are best considered as budget estimates and are subject to revision at the end of each budget period.

STANDARDS FOR OVERHEAD EXPENSES

The preparation of standard rates for the allocation of overhead expenses to production is more complex than the development of either material or labor standards. Two distinct problems are involved: the estimation of the overhead components, such as indirect labor, supplies, depreciation, power, taxes, and rent, and the determination of the rate of production which forms the basis for setting standard overhead rates. The preparation of both estimates is dependent upon an adequate system of budgetary control and budgets become more essential in the development of overhead standards than for either material or labor.

Of the three elements of cost, overhead has been given the most attention in regard to standardization. In concerns where carefully designed specific order cost systems are in use, standard overhead distribution rates virtually are employed. Where departmentalization has not been followed as a basis for the accumulation of overhead expenses, the total overhead for the concern is estimated in the form of a manufacturing expense budget; the production for the period is budgeted for direct labor hours, direct labor cost or machine hours; and the estimated overhead is divided by the estimated production, in terms of one of the three bases, to obtain a distribution rate for the purpose of allocating overhead to production during the budget period.

In other concerns, where departmentalization has been followed, the estimates of overhead are classified by service and production departments, the service department estimates being re-allocated to the production departments; the production expected from each production department is estimated; and the estimated overhead expense for each production department is divided by the estimated production of that department, expressed in terms of direct-labor hours, direct-labor cost, or machine hours, the resulting figure being an overhead distribution rate for each department.

Thus, whether a single overhead rate or departmental rates are established through the use of budgets, such rates may be deemed to be standards for overhead distribution. The procedure for establishing standard overhead rates and the accounting technique for overhead is exactly the same as that employed in specific order or job cost accounting, so no new features, regarding these problems, need be introduced.

There are a variety of opinions concerning what should constitute the proper estimates of overhead and production in the determination of standard rates. The formula for a standard departmental rate would be:

$$\frac{\text{Standard overhead for Dept. A for the period}}{\text{Standard direct labor hours (or some other base) Dept. A}}$$

$$=\text{Standard overhead rate for Dept. A per hour of direct labor.}$$

A quotation from the report of a survey of eight manufacturing concerns will suffice in showing differences in opinion as to the proper method of compiling standard overhead distribution rates.[15]

> For example, the standard burden rates of some companies represent the average of burden rates over a period of years; in certain other organizations the standard burden rate represents the distribution of burden for a normal year or period of production; still other companies adjust their burden rates periodically so that the standard represents, as closely as possible, current existing conditions; while still others base their rates on estimated future production and costs for the period in question.

Obviously, the first three bases of preparing standard overhead expense would be of little value to management in controlling future operations. During periods of rapidly changing market conditions, an average of burden rates incurred in the past would be of little value other than as a guide to future expenditures. Even long established concerns have found past conditions and such terms as "normal" uncertain and unknown quantities when comparing the past with future production during the changing conditions of the past five years; and even "current existing conditions" may not be reliable indicators of the next budget period.

The proper estimation of overhead expenses in the development of standards is based upon manufacturing expense and production budgets. The value of standard overhead expense items should be established after proper investigation and survey of the present and expected expenses for the budget period, consideration being given to the rate and amount of production for the period. The expenses should be classified into controllable and fixed items, the former being adjusted by persons in authority to a reasonable amount considering the plant capacity and expected production for the period. The variable and fixed expense estimates should be shown separately in the overhead expense budgets or in the standing orders classified

[15] *The Manufacturing Expense Budget*, Policy-holders Service Bureau, Metropolitan Life Insurance Company, p. 6.

by departments, so that periodic comparisons can be made between the estimates and the actual expenses.

It may be concluded, then, for purposes of managerial control, it is more logical to prepare the overhead expense estimates as standards in terms of the conditions to be expected during the period under consideration as shown in the manufacturing overhead expense budgets.

The other problem, the proper estimation of the amount and rate of production which forms the basis of setting overhead standards, may be formulated and solved after selecting one of the following possibilities:

1. The maximum theoretical capacity of the plant.
2. The maximum capacity of the plant, less allowances for normal idle time, vacations, and other ordinary operating interruptions.
3. Average or normal conditions of production, consideration being given to a past period such as the last five years.
4. Estimated production, in view of the sales expected for the budget period.

The fourth basis for the setting of the standard amount of production seems the most practical and useful. The present state of the market for the company's products, the expected changes in market conditions of a seasonal nature or arising during periods of depression, expected changes in demand due to new styles or development of substitute products by competitors, and changing management policies should all be carefully considered in the forecasting of the expected volume of business at prevailing or expected sales prices for the budget period. The resulting estimates are usually reduced to such terms as direct labor hours, direct labor costs, machine hours, or units to be produced with the further classification by production departments where departmental rates are desired. The standards set for production should be used during the budget period and actual performance should be controlled so as to agree with the standards. The standards should be revised at the beginning of each budget period.

The preparation of standard overhead distribution rates in a company, manufacturing men's fancy worsted fabrics, with sales over $2,000,000 annually is described as follows:[16]

Standards for overhead were expressed as percentages of direct labor, a separate rate for each department resulting from the budget of:

1. Overhead of the Production Department itself, plus its allocation of general expenses; compared with
2. Direct labor, resulting from application of standard labor cost to anticipated production for department.

The budget was based upon experience, modified to meet anticipated production requirements of the season. Allocation of predetermined overhead to productive department was made according to character of expenditure, in the proportion that each class of expenditure was deemed to benefit each department. In predetermining departmental direct labor, consideration was given to proposed ranges of fabrics for the season as Fall and Spring fabrics differ in demands upon certain departments.

The practice followed in setting standard overhead rates in a Pennsylvania metal working plant is described by the comptroller as follows:[17]

Briefly, we segregate all of our expenses by departments, and at the beginning of each fiscal year we figure a complete budget covering sales and all expenses, for the ensuing year. From the budget figures we establish a standard overhead rate for each production department, and use these standard rates in figuring our estimated costs, on which our selling prices for the ensuing year are based. These standard rates are fixed at the beginning of the year, have always stood for at least a year, and in some cases for two years, without change.

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[16] W. L. Keating, *How to Set Standards,* National Association of Cost Accountants, 1931, p. 28.

[17] *The Evolution of Overhead Accounting,* Department of Manufacture, Chamber of Commerce of the United States, March 1, 1927, p. 26.

PRIORITY OF TAXES UNDER THE BANKRUPTCY ACT

Harry L. Kunze

The statement of affairs, when used, exhibits the assets of a bankrupt business classified according to the various claims the creditors have to the assets. It may, therefore, serve to make more concrete some points raised in this article. The left side of the statement is very often presented in the following form:

Book Value	*Assets*			*Expected to Realize*
	Assets Pledged with Fully Secured Creditors:			
$7,000	Land-Estimated Value		$ 6,000	
20,000	Building-Estimated Value		12,000	
	Less Mortgage		18,000	
	Payable	$17,000		
	Accrued Interest	400	17,400	$ 600
	Assets Pledged with Partially Secured Creditors:			
10,000	Investments—Estimated Value		$ 7,000	
	Security for $8,000 Book Loans			
	Free Assets:			
300	Cash			300
4,000	Accounts Receivable			2,000
3,000	Notes Receivable			1,500
5,000	Merchandise			3,000
	Total Free Assets			7,400
	Deduct Preferred Liabilities, per contra			1,300
	Net Free Assets			6,100
	Deficiency to Creditors			7,800
$49,300				$13,900

All unpaid taxes are generally included in the item of Preferred Liabilities and are are thus deducted from the total of the values shown in the "Expected to Realize" column. It is submitted that under certain circumstances it would be improper to show taxes in this manner.

It is necessary to consider and interpret Section 64 of the Bankruptcy Act which provides, in part, as follows:

Debts which have priority

(a) The court shall order the trustee to pay all taxes legally due and owing by the bankrupt to the United States, state, county, district, or municipality, in the order of priority as set forth in paragraph (b) hereof: Provided, that no order shall be made for the payment of a tax assessed against real estate of a bankrupt in excess of the value of the interest of the bankrupt estate therein as determined by the court.

(b) The debts to have priority, in advance of the payment of dividends to creditors, and to be paid in full out of bankrupt estates, and the order of payment shall be: (There then follows what is shown in summary form below)

1. **Cost of preserving the estate.**
2. **Filing fees, and expenses incurred in recovering transferred or concealed property.**
3. **Cost of administration.**
4. **Expense of opposing composition.**
5. **Wages earned within three months prior to bankruptcy, not to exceed $600 to each claimant.**
6. **"taxes payable under paragraph (a) hereof."**
7. **Debts entitled to priority under state or federal law.**

Something of the history of this section, and one view which has been taken of its present wording, may be gathered from the following statement from a District Court case in which wage creditors claimed priority over the state, county and city holding liens for taxes:

Under the old phraseology of section 64, the United States Supreme Court held that federal and state taxes were to be paid in full before claims for preferred wages, unless it clearly appeared that the particular tax in question had been subordinated to such claims by some relevant federal or local law. Oliver, Trustee, v. United States, 268 U.S. 1, 45 S. Ct. 386, 69 L. Ed. 817.

After the rendition of this decision, however, and in my opinion to meet the same, Congress passed the amendment of 1926, which changed section 64 so as to make it expressly provide, not as in the old law that the trustee should pay all taxes legally due "in advance of the payment of

dividends to creditors," but as appears in the words of the amended section "in the order of priority as set forth in paragraph (b) hereof."[1]

The court considered that the change in words from "in advance of the payment of dividends to creditors" to "in the order of priority as set forth in paragraph (b) hereof" was very significant, and held that the labor claims were prior to the tax liens.

Not long thereafter another District Court had before it a similar question and came to the same conclusion. Referring to the United States Supreme Court ruling, it said:

> At the first session of Congress following this decision, it passed the amendment of 1926, which, in section 64, did subordinate the payment of all taxes to the payment of preferred wages and also that, since the amendment of 1926 to section 64 makes no distinction between taxes which have become liens and those which have not, section 64 is now the "positive one" and section 67d must be construed in view of section 64 as it now stands.[2]

From the latter statement we now see that there may be a distinction between those taxes which have a lien and those which do not, and that another section of the Bankruptcy Act may be involved, viz., Section 67d, which reads:

> Liens given or accepted in good faith and not in contemplation of or in fraud upon this act, and for a present consideration, which have been recorded according to law, if record thereof was necessary in order to impart notice, shall, to the extent of such present consideration only, not be affected by this act.

The two cases above have been used to show how and possibly why Section 64 has been amended and what interpretation might now be placed upon it. From reading over the specified debts and the order of their payment, a person could easily come to the conclusion that all taxes have been definitely relegated to sixth place in the list. It is under this view that all taxes would be placed in the "Preferred Liabilities" section of the statement of affairs and then deducted along with other liabilities having priority from the net free assets. However, these cases, though recent in date, are the decisions of District Courts only and represent, it is believed, the minority opinion on the subject.

In presenting what is undoubtedly the majority opinion we can well begin with another Georgia District Court decision given prior to but in the same year as the first case above. The court held that the provision in Section 64(a) of the Bankruptcy Act requiring the trustee to pay all taxes in the order of priority set forth in (b), applied to taxes that were without lien, and gave as a reason that:

> After protracted study I have concluded that a proper understanding of section 64 of the Bankruptcy Act and section 67 of such act will disclose that there is no conflict between them and that both can be given full effect. The essential to this is that there shall be appreciated a difference between taxes with a lien and taxes without a lien, and further that the bankrupt estate does not consist, as a part thereof, of the entire value of the property upon which there is a valid lien, but only the equity in such property.
>
> . . . What possible reason is there to justify the protection of the validity of a mortgage lien and treating the bankrupt estate as comprising only the equity when the same principle is not applied to a tax lien, which is superior to the mortgage lien?[3]

This decision clearly states a principle which must be kept in mind in reading Section 64, but which is easily overlooked because of the wording of that section. This principle is that only the excess value of any property over existing liens is treated as part of the *estate* of the bankrupt.[4] The payment of liabilities having priority is made out of the *estate* only. Section 64 makes provision for certain liabilities which might otherwise be without any security, but does

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[1] In re Glover Casket Co. 1 F. Supp. 743, D.C. Ga. 1932, p. 744.

[2] In re Baldwin 4 F. Supp. 90, D.C. Pa. 1933, p. 91.

[3] In re Dublin Veneer Co. 1 F. Supp. 313, D.C. Ga. 1932, p. 316.

[4] "By the words 'of estates,' in section 62, supra, and 'bankrupt's estates,' in section 64, subsec. 'b,' supra, is meant the unincumbered assets generally of a bankrupt, properly administrable in bankruptcy, as distinguished from that of the property of a bankrupt dedicated by law to the payment of a particular obligation, or upon which there is a specific lien." In re Rauch 226 F. 982, D.C. Va. 1915, p. 984.

not affect claims secured by mortgage, pledge, or other lien.

All liabilities of a bankrupt concern may be ranked in the order of payment in the following manner:

1. Secured Liabilities
2. Liabilities Having Priority
3. Unsecured Liabilities

A particular debt, however, may fall within more than one group. For example, if bank loans of $8,000 are secured by investments having an estimated value of $7,000, the bank loan is a secured liability to the extent of $7,000, but unsecured in the amount of $1,000. Such a claim is very often set up in the statement of affairs in a separate section entitled "Partially Secured Liabilities." Nearly all taxes may be classified under the second group above but many taxes may also come within the first group and thus secure a much higher ranking than that given to taxes which can come only under the priority statute. Moreover, the taxes which fall within the first group may come ahead of the other liabilities in that group. This may result in pushing part of the claims which would otherwise be fully secured into the third or unsecured group. Referring to Exhibit A, if there were taxes assessed against the real estate amounting to $1,000, these would constitute a lien upon the property superior to the mortgage in practically all jurisdiction. If the estimated value shown is realized from the property, $400 of the mortgage payable claim would be forced to share with the general creditor in the distribution of the assets.

The form in Exhibit A is constructed in such a manner that it may clearly show the claims of the three classes of creditors against the assets. It should be pointed out, though, that the "Expected to Realize" column does not contain what one might expect. It shows not the total estimated realizable values but only the surplus above liens. It contains excess values which the trustee or receiver may expect to receive. The more or less standard heading for this column is not descriptive of its contents. Perhaps a title such as "Estimated Value above Liens" would be better. McKinsey and Noble use "Available for Unsecured Claims" in their recently published book.[5] It seems difficult to find a short title which accurately describes the amounts placed in this section. It may be appropriate here to mention that Finney in his latest edition, Volume II, uses an improved title for another section of the statement, i.e., "Liabilities Having Priority" in place of "Preferred Liabilities" because of the definite meaning which the word "preference" has under the bankruptcy law.[6]

The Dublin Veneer decision was stated to represent the majority opinion. This case was carried to the Circuit Court of Appeals which ruled that the tax liens must be paid in full ahead of creditors given preference under Section 64, and thus affirmed that part of the judgment of the District Court relating to taxes.[7] Because the taxes had become valid liens on the property before bankruptcy they came under the provisions of Section 67d, and as the state law did not give the employees of the bankrupt a lien they came only under the priority section.

Other decisions support this view. Tax claims were divided into two classes by the Circuit Court of Appeals in the Brannon case decided in 1933. City taxes were found to be entitled to a general lien and consequently came ahead of landlord's lien, wage claims and state and county taxes. With respect to the last claim the court said:

> Therefore, so far as state and country taxes are concerned, we find no lien securing them within the meaning of the Bankruptcy Act. They stand not as secured debts but as debts having priority under the state laws on insolvency, and would fall under section 64b (7), but since they are also taxes, in that character they fall under section 64b (6).[8]

It may be noted that a state might give certain rights to tax claims which would

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[5] *Accounting Principles*, McKinsey and Noble, 1935, p. 686.

[6] H. A. Finney, *Principles of Accounting*, Vol. II Advanced, 1934, p. 129.

[7] Dunn v. Interstate Bond Co. 68 F (2d) 364, CCA 5th Cir. Writ of Certiorari denied in 292 U. S. 645.

[8] In re Brannon 62 F. (2d) 959, CCA 5th Cir., 1933, p. 962.

enable them to come under 64b (7), but that there would be no advantage in this since they can take a higher ranking under 64b (6).

In a 1935 decision, In re Ivel Displays,[9] it was held that certain franchise taxes became a lien upon corporate assets and were, therefore, entitled to priority over wage claims.

In another case (In re Tresslar) it was insisted by the wage claimants that the amendment of 1926 made taxes subordinate to wages. The court answered this argument in the following language.

> It does not seem to me that Congress by the amended Act of May 27, 1926, intended to destroy liens such as created by mortgages and the like, and by the same token it does not seem that Congress intended to, if indeed Congress could do so, destroy the lien for taxes created by the Alabama statute.[10]

It was further explained that a valid lien created either by contract or by statute reduces the estate of the bankrupt and that Section 64 applies only to property which belongs to the bankrupt's estate. Taxes without lien would come within that section. What constitutes the estate of the bankrupt is governed by the laws of the state.

The Tresslar decision was quoted with approval in a recent Circuit Court of Appeals case in which the comment was made that:

> We are not unmindful of several District Court cases holding claims for wages to be superior to tax liens, but as we have seen, the weight of authority is to the contrary.[11]

It is hoped that what has been a rather complex matter has been made a little more clear. That there is a great deal of confusion on the subject is evidenced by the treatment given it by a number of accounting books. The 1932 edition of the Accountants' Handbook unfortunately presents on page 1606 a classification of liabilities as set forth by Finney in his "Principles of Accounting," Vol. I, which was based on the old law. In his latest edition, Finney shows part of Section 64 as amended.[12] Several accounting textbooks published after the amendment of 1926 apparently classify liabilities according to Section 64 as it stood before being amended. Kester lists taxes as first in order of priority of claims within the preference class.[13] Husband and Thomas summarize "Debts given preference by law, usually in the following order" and give taxes first place.[14] In Streightoff's book it is said that taxes are generally stated to be first in order of preference or priority but that "As a matter of fact, state and federal taxes often are not paid in priority to anything except" what are now items (5) and (7) of Section 64(b) and general creditors.[15] Taxes come first in the list of debts which are given by law a prior claim on the free assets as shown by Taylor and Miller. The following footnote, however, is presented by them which reveals the difficulty some have had in classifying taxes:

> There is an opinion held that taxes constitute a claim which may be asserted ahead of the claims of secured creditors, even to the point where, if necessary, the secured creditors might have to surrender their security. The contrary opinion is that no such claim can be asserted and that taxes rank merely ahead of all other unsecured claims.[16]

As we have seen above neither opinion gives a true and complete picture of the position that taxes occupy. Only taxes *which have a lien* come ahead of other secured creditors, and *taxes without a lien* do not come first in the priority group but, since 1926, have been put in sixth place. Remington on Bankruptcy states:

> The amendment of 1926 clears up the ambiguity that formerly existed in the wording of Bankruptcy Act Section 64 (a) by amending it to read: . . . and then by prescribing for taxes the 6th place in the order of priority, coming next in

[9] In re Ivel Displays 74 F. (2d) 702, CCA 2nd Cir., 1935.

[10] In re Tresslar 20 F. (2d) 663, D.C. Ala., 1927, p. 664.

[11] Ingram v. Coos County, Or. 71 F. (2d) 889, CCA, 9th Cir., 1934, p. 891.

[12] Cited in Note 6 supra., p. 127.

[13] *Advanced Accounting*, R. B. Kester, Third Revised Edition, 1933, p. 778.

[14] *Principles of Accounting*, Husband and Thomas, 1935, p. 655.

[15] *Advanced Accounting*, F. H. Streightoff, 1932, p. 388.

[16] *Intermediate Accounting*, Taylor and Miller, Vol. II, 1934, p. 252.

order after the payment of the wages of workmen, clerks, salesmen and servants.[17]

Accounting books have failed generally to distinguish between secured and unsecured taxes and yet such a distinction is essential to a proper understanding of the matter.

A lien may be secured for Federal taxes under a statute which has been summarized by Remington in the following manner:

In 1913, and, later, by the Amendments of February 26, 1925, and of May 29, 1928, to U. S. Rev. Stat. Sec. 3186 (43 Stat. 994, U.S.C. title 26, Sec. 115) Congress provided in effect that, until notice of any tax lien of the United States shall be filed by the collector of taxes in the office of the Clerk of the United States District Court, such tax shall not be a valid lien as against any mortgagee, purchaser or judgment creditor, and further empowered the several states to enact similar requirements of filing in the state recorder's or registrar's office; . . .[18]

The federal government is entitled to a lien for unpaid taxes but this lien becomes effective only after notice of the lien has been properly filed. Mortgages and other liens recorded before the government lien became valid would be paid first. Order of payment depends upon whether the taxes are secured by lien or not—and we are back again to the main point emphasized throughout this article.

One more point should be made here. There may be some taxes which the receiver need not pay at all. Section 64(a) states that "no order shall be made for the payment of a tax assessed against real estate of a bankrupt in excess of the value of the interest of the bankrupt estate therein as determined by the court." Under this provision the receiver may abandon certain real estate and disregard taxes assessed against it. This was stated as follows in a recent case:

It is inequitable and unjust to order payment out of personal property assets of taxes accruing, or to accrue, on the real property of one adjudged a bankrupt in the light of the facts in this case. Such taxes are a lien on the real estate, and where it is subject to a mortgage, there is the possibility that upon investigation and examination the trustee may petition the bankruptcy court for an order directing him to disclaim the mortgaged real estate as burdensome upon the estate and to direct the trustee to abandon it.[19]

The same rule was followed in Kimmel et al. v. Crocker[20] decided in the same year. The receiver or trustee, it was said, should not take over properties encumbered by undisputed liens unless the unsecured creditors have a good chance to get something after the liens are satisfied. The case is interesting because of a point raised which shows how carefully the language of Section 64 must be followed. A processing tax was involved, which was held to be entitled to a lien on real estate, but because it was not a "tax assessed against real estate," it avoided that part of Section 64(a) containing the quoted words, and was given priority over general creditors under the other provisions of Section 64.

Perhaps the following partial outline, which is an expansion of the three-fold classification of liabilities presented earlier, will indicate how taxes should be treated in accordance with the court decisions reviewed above.

1. Secured Liabilities
   - Taxes with a lien
     - Real estate taxes, usually ahead of mortgages and other liens.
     - Taxes not to be paid by receiver or trustee if assessed against real estate which should be abandoned.
     - Taxes to be paid before or after mortgages and other liens depending on when the lien was perfected.
2. Liabilities Having Priority
   - (1) —
   - (2) —
   - (3) —
   - (4) —
   - (5) —
   - (6) Taxes without a lien
3. Unsecured Liabilities

[17] *Remington on Bankruptcy*, Vol. 6, p. 2 of the 1935 Supplement, for use during 1936.

[18] Cited in Note 17, supra, pp. 150 and 151.

[19] Torrington Co. v. Sidway-Topliff Co., 70 F. (2d) 949, CCA, 7th Cir., 1934, p. 954.

[20] Kimmel et al. v. Crocker, 72 F. (2d) 599, CCA, 10th Cir., 1934.

THE FAIR VALUE AND YIELD OF COMMON STOCK

Gabriel A. D. Preinreich

One of the most important problems of corporate finance is the valuation of proprietary equities. A good deal has been said and written upon the subject, chiefly from the viewpoints of buyer and seller bargaining for a going concern, and the fundamental principle governing valuation for such purposes is, generally speaking, well understood. The same principle, however, has a much wider scope; it not only explains the basic phenomena of the stock markets, but also furnishes the essential clue to a unified theory of corporate distributions.

Any number of contradictory and often absurd notions are still current on the ways and means of determining the investor's income from common stock, those incorporated into laws or handed down by courts being by no means always the most reasonable. No progress can be made in this field, which is of the utmost practical importance to investors, until a solid foundation of theory is laid. Only after the general principles underlying the value and yield of common stocks are thoroughly understood, will it be possible to formulate subsidiary principles concerning the nature and meaning of the often highly complex economic services, which an investor derives from common stock.

The general law governing the value of capital goods has been known for some time. It may be stated briefly by saying that any capital good may be bought or sold for the present value of all future services expected from it. This rule is continuously being applied in practice by bond-traders and all bond tables are based upon it. Nevertheless, apparently no one has made systematic use of it to explain the formation of common-stock values. Discussions upon the subject are frequent, but they seldom clear the hurdle of terminological difficulties. Indeed they are often adjourned, before the participants realize that they have not been speaking the same language.

To review this preliminary difficulty, Fig. 1 may be examined. The bar C at the extreme left represents the corporate capital paid in upon organization. It is connected to the right with a shorter bar representing corporate earnings for the first year. These earnings are shown divided into two parts: The lower black area equals one year's interest on the capital and the unshaded area atop it indicates corporate earnings in excess of the normal interest rate. The diagonally shaded bar connecting the top of the first year's earnings with the bottom of those of the second is the cash dividend paid at the end of the first year. For subsequent years, earnings and dividends alternate in the same manner, until the entire capital is returned by a final liquidating dividend at the end of the tenth year.

In accounting terminology the black bars are called "interest on investment," the unshaded bars "excess (corporate) earnings" and the sum of both "(corporate) earnings." The terms "income" and "profits" are synonymous with "earnings" for all purposes germane to the present discussion. The diagonally shaded bars are "dividends," except that the last one, or at least that portion of it which returns the original investment is known as a "liquidating dividend."

A number of economists, Irving Fisher among them, use a different terminology. To them "income" means the diagonally shaded bars ("dividends" to the accountant). "Earnings" are used in the accountant's sense; "capital gain" is the difference between "earnings" and "income." Finally the phrase "services actually rendered by capital" is synonymous with "income," while "capital gain" is further defined as "services which capital might have rendered in addition without suffering reduction below its original level."

Apparently discussion will be facilitated by avoiding the use of the term "income." "Earnings," from the investor's point of view, are that portion of the entire corporate earnings, which are applicable to his hold-

ings. The investor's return from his investment is usually called the "yield." "Services" may be used interchangeably with "distributions" as generic terms including "dividends" as well as all other valuable things received from the company, e.g., rights, warrants, etc.

"Capital value," "fair value," "fair market value" or "present value" is the theoretical level around which the continuous oscillations of actual market quotations are, in the same data have been redrawn in Fig. 2, giving recognition to the fact that earnings accrue gradually, while dividends are distributed suddenly. Fig. 2 accordingly shows book values prevailing at various dates in a form suggestive of the edge of a saw. Above this curve of book values, the corresponding capital values have been plotted. The descending steps are the cash dividends and are therefore equal for both curves but, whereas book values between dividend dates

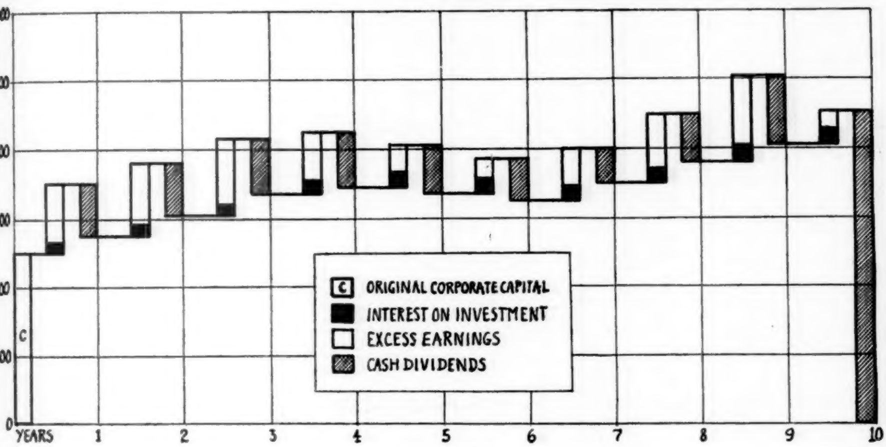

FIG. 1

the long run, evenly distributed. Prof. Fisher devotes considerable space in his works to the proof that capital value can be obtained only by discounting "services" (which he calls "income") and not by discounting "earnings." That is true, although accountants have long been using an alternative method of computation, which is equally correct. Goodwill is commonly obtained by discounting "excess earnings." If the original investment (C) is added to the goodwill, the same capital value results as from the discounting of "services." In other words, the discounted value of the unshaded areas in Fig. 1 equals the discounted value of those shaded diagonally. The black areas are mere payments for time and must be disregarded.

To show clearly the connection between the (corporate) book values presented in Fig. 1 and the corresponding capital values, increase irregularly by greater or smaller earnings, capital value increases instead at a constant rate, the rate of interest. From this comparison a fundamental rule of investment can immediately be derived:

No investment can yield either more or less than the money rate, if all data upon which its value depends are known.

This is the case of a safe bond. The complications surrounding the computation of the fair value of common stock arise chiefly from uncertainty regarding the extent of the future services which may be expected. In the absence of definite information, it is necessary to fall back upon estimates based upon past performance, analysis of the future market in the corporation's product and forecasts of general economic conditions. For comparative purposes, information so obtained is most useful when expressed in

terms of a common unit, i.e., when converted into rates. To accomplish this task, a fundamental difference between loan-funds and business-equities must be borne in mind.

In the money-market it is always assumed that the earning power of capital is matched by an equal power to compound its own earnings. This assumption is justified, whenever earning power is derived from a contract enforceable at law and backed by the borrower's resources. The proprietary equity of a business, however, is in a different position; its earning power is derived, not from a contract, but from successful business operations. It will depend entirely upon the degree of success, how much, if any new investment is needed from year to year in that particular business. In such circumstances, it must be recognized that earning power and ability to expand are two distinct concepts, neither of which is necessarily governed by the other.

In effect then, there are two kinds of dollars, which may be called the production-dollar and the market-dollar, respectively. The former is invested in a productive capital good and is therefore at work under special conditions which enable it to produce earnings at one individual rate and opportunities for new investment at another. The market-dollar, on the other hand, merely has an expectation of earning the money rate and expanding at the same rate. The problem of finding the fair market value of equities accordingly consists of finding that number of market-dollars, which equal a single production-dollar in earning and expanding power.

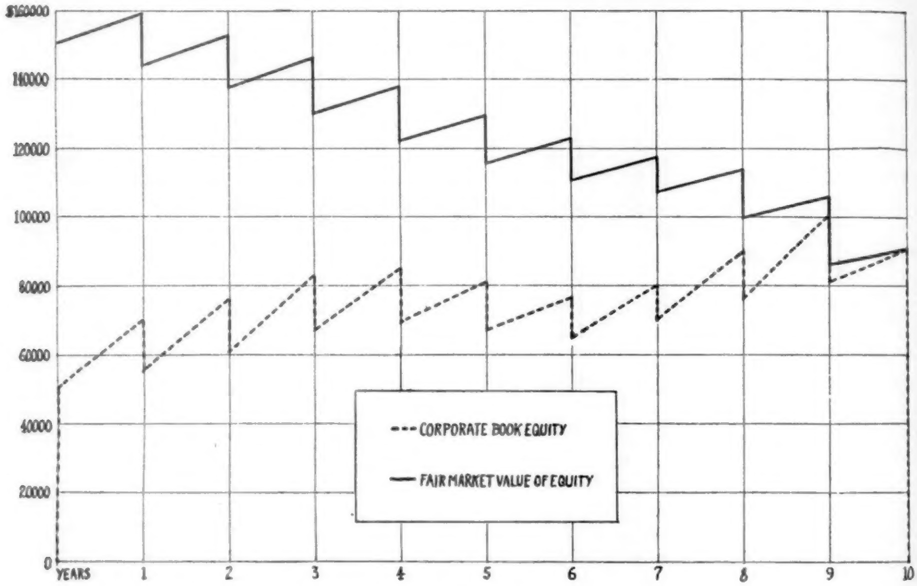

Fig. 2

So far the analysis has called attention to the existence of three different rates, which may be defined as follows:

1. The *earning rate* is the quotient of earnings by that portion of the corporate net worth which represents productive assets. This excludes idle assets which may have been hoarded.
2. The *expansion rate* is the rate of increase of the productive corporate net worth owned by the investor.
3. The *money rate* is the rate at which the future services of capital are discounted.

The derivation of these fundamental rates from primary business data often requires extensive mathematical and statistical analysis, the various steps of which cannot be described in an outline of theory. The mere mention of these rates, however, is sufficient to call attention to another fundamental principle of investment:

The fair market value of any investment capable of the perpetual compounding of its own earnings at a rate higher than the money rate must be infinite.

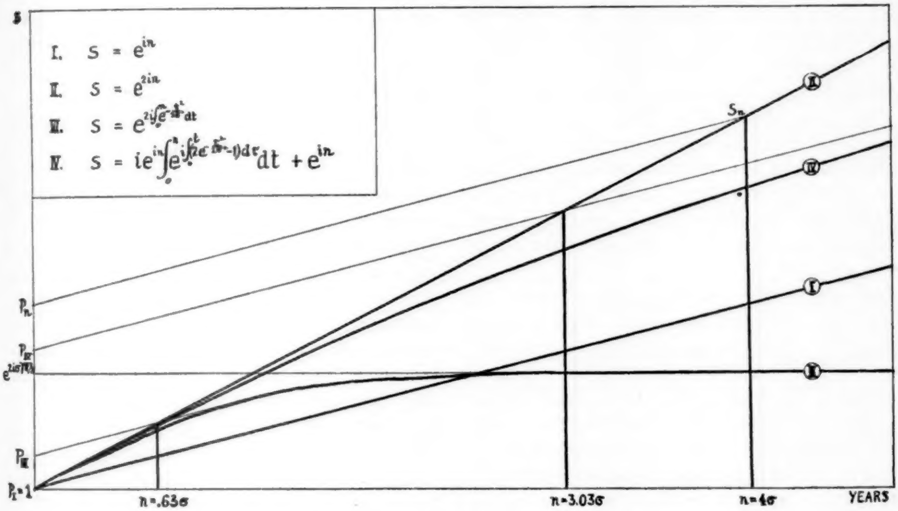

FIG. 3

This proposition is self-evident because, in such circumstances, the shrinkage through discounting is less than the growth through compounding. There are many listed stocks which have in the past demonstrated earning and expanding capacities in excess of the money rate. That their market quotations have not reached infinity even at the height of the 1929 boom is due to the fact that future services are discounted not only at the money rate, but also at the *rate of risk*, which rises to practically infinity even for comparatively short finite periods. The mathematical expression of risk is the probability curve or curve of error described in textbooks on statistics. Its application to the problem of appraising common stocks is shown in Fig. 3 on the usual semi-logarithmic or ratio chart.

The straight line *I* represents the sum of \$1 compounded at the prevailing money rate. Line *II*, having a slope twice as steep, accordingly represents an investment, the earning and expansion rates of which equal twice the money rate. If it is guaranteed to retain its productivity for say n years, its present value (capital value) P_n can be ascertained graphically by drawing the corresponding ordinate to obtain the sum S_n and then tracing a discount line parallel to *I*, until it intersects the axis of ordinate at the point P_n.

Curve *III* represents an investment, the the earning and expansion rates of which, although estimated to equal those of *II*, have both been discounted for their probability over a period of n years by using a curve of error with a standard deviation of $n/4$. The present value P_{iii} of this investment is obtained by drawing a tangent discount line, which intersects the axis of ordinate at the point P_{iii}.

Curve *IV*, finally, was plotted on the supposition that an earning rate equalling twice

the money rate can be expected indefinitely,[1] but that a similar expansion rate must be discounted for its probability over a period of n years. The present value P_{iv} of this investment is indicated by the asymptote having the slope of the money rate, which must be retraced from infinity to the intersection P_{iv}.

Curves *III* and *IV* were chosen at random from many other possibilities to illustrate the two extremes in the application of the theory of probability to future earnings and expansion. In the natural order of development, when the market of the corporate product becomes more and more saturated, the expansion rate will decline first, while satisfactory earnings may be maintained for a long period thereafter. The expansion rate, therefore, must usually be discounted for its probable duration over a shorter period than the earning rate. Thus, most actual situations could be covered by applying some compromise method less extreme than either of those used in computing *III* and *IV*.

All these compromises, using curves of error with different standard deviations for the earning and expansion rates respectively are too difficult to compute for practical purposes, but fortunately their relationship to simpler curves not involving the probability-integral is easily established. All that need be noted is the approximate location of the points where the discount lines determining the present values of the complicated curves intersect the simple curves, of which *II* is an illustration. Thus, for instance, the present value of *III* for $.19n$ years (i.e., up to the point where its earning and expansion rates have been discounted for risk to the level of the money rate) is the same as that of *II* for $.15n$ years approximately. Similarly, the present value of *IV* for an infinite period is the same as that of *II* for about $.75n$ years.

For practical purposes, therefore, all the intricacies connected with the curve of error can be avoided by substituting shorter periods not discounted for risk for the longer discounted ones. Whether consciously or not, this principle has long been observed in practical computations of goodwill, which generally estimate the period of future excess earnings at a very conservative number of years, varying somewhat according to the type of business. In effect then, a *horizon* or sudden limit to perfect visibility is set up as a substitute for a greater distance of gradually declining visibility into the fog of the future. This *horizon* has the same function as the date of maturity in the case of a bond and is the fourth element determining the value of common stock, the other three being the earning, expansion and money rates already introduced.[2]

Now it may be objected that, just as the price of a bond is computed from the coupons, it seems easiest to appraise common stock by estimating the future stream of dividends, without paying any attention to such mathematical intricacies as earning and expansion rates. That is indeed often done in practice, but since common stocks have no coupons, such guesses can have but little value, unless it is clear to the person making the guess that it is the interplay of earning and expansion rates which determines both the form and the size of the distributions which it is reasonable to expect.

Even cursory observation shows that there are various kinds of corporations. In certain cases the retention of the entire earnings is insufficient to provide for necessary expansion. Other corporations can reinvest only a portion of their earnings, while some are unable to do so at all. These apparent differences in kind often represent merely successive stages of development reached by different corporations. It is an important duty of the corporate management to formulate dividend policies which conform to these conditions. A company which cannot reinvest its earnings, must distribute them; slowly expanding companies will distribute the difference between the total earnings and

[1] At normal money rates the difference between the respective values of a perpetuity and a hundred-year bond is negligible. Any period exceeding a hundred years may therefore be considered infinite for practical purposes.

[2] The computation of the horizon for a given common stock involves the mathematical fitting of a trend line to the time series of actual market quotations per dollar of book equity.

that portion which can be reinvested. Rapidly expanding companies, in turn, will not only endeavor to retain all earnings, but must in addition attract new capital. This fundamental connection between earnings, expansion and distributions may be called *the principle of good management* which *requires that corporate directors shall neither retain sterile earnings, nor overlook opportunities for expansion.*

Upon this foundation it is possible to build a unified theory of corporate distributions which will clear up all the apparent contradictions and misconceptions so prevalent in this important field.[3]

The interplay of the four elements determining the value of common stock may be illustrated by four purposely simplified examples, all of which assume an earning rate of 10% p.a., a money rate of 6% p.a. and a horizon of five years.[4]

Example A

If the expansion rate is nil, \$100 of book equity will be worth \$116.85, obtained by discounting an annuity of five payments of \$10 each and a final payment of \$100 due five years hence.

Example B

If the expansion rate is 5% p.a., one-half of each year's earnings will be reinvested and the other half distributed. A book equity of \$100 is therefore worth \$118.52, computed by discounting an annuity of five payments growing gradually from \$5 to $\$5\times1.05^4$ and adding thereto $(105/1.06)^5$.

Example C

If the expansion rate is 10% p.a., no cash dividends will be available and the value of a \$100 book equity is $(110/1.06)^5=\$120.35$.

Example D

If the expansion rate is 15% p.a., contributions amounting to one-half of each year's earnings must be obtained outside. A book equity of \$100 having this expanding capacity must be worth \$122.35, because only an annuity growing from \$5 to $\$5\times1.15^4$ is lacking to make it worth $(115/1.06)^5$.

Let us see now what happens a year after these investments were made. If the appraisal of a year ago is confirmed, investors will now estimate that the horizon is only four years ahead. Accordingly, each of the four investments will increase in value at the money rate; *A* from \$116.85 to \$123.86 (of which \$10 is the cash dividend awaiting distribution), *B* from \$118.52 to \$125.63 (of which \$5 is the cash dividend awaiting distribution), *C* from \$120.35 to \$127.27 and *D* from \$122.35 to \$129.69 (because only \$5 is needed to make it worth $(115/1.06)^4=\$134.69$).

As a matter of fact, however, investors did not really know that the companies would liquidate at the end of five years. They merely refused to look farther ahead. If prospects remained unchanged during the year elapsed, they will again be willing to look five years ahead and, seeing no signs of an approaching end, will be inclined to repeat last year's bargains of buying \$100 book equities for \$116.85, \$118.52, \$120.35 and \$122.35 respectively. By doing so, they will pay these prices for 100/100, 100/105, 100/110 and 100/115 of the original productive equities which cost the same amounts a year ago, but have expanded in the meantime. In other words, the market values of the four investments have risen as follows:

Example A

From \$116.85 to \$126.85, accounted for by \$10 of sterile earnings awaiting distribution.

Example B

From \$118.52 to \$129.45. The earnings are again \$10, but one-half of them can be invested productively and therefore creates additional goodwill to the amount of $\$18.52\times.05=\$.93$.

Example C

From \$120.35 to \$132.39. The earnings of \$10 can be reinvested, thereby creating $\$20.35\times.10=\$2.04$ of additional goodwill.

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[3] See the author's *The Nature of Dividends*, New York, 1935.

[4] The fair values stated in the four examples may be obtained either be discounting each payment separately or from the general formula

$$P=\frac{r-i}{x-i}\left[\left(\frac{1+x}{1+i}\right)^h-1\right]+1.$$

In this formula P = fair market value of \$1 of book equity; r = earning rate; x = expansion rate; i = money rate and h = horizon.

Example D

From \$122.35 to \$135.70. The expectation that a contribution of \$5 will be invested in addition to \$10 of earnings, creates new goodwill amounting to \$22.35×.15 = \$3.35.

It may therefore be said that:

Until the end of operations emerges upon the horizon, the fair market value of a given proportion of the total corporate equity increases at its expansion rate as adjusted for accrued, but unpaid distributions or contributions.[5]

book equity at the time zero. With the passage of time, they separate, each following its own expansion rate through the interaction of successive earnings and distributions. The slope of the lines representing the earnings corresponds to the earning rate of 10% p.a. for all book-value curves.

The market-value curves start at the respective initial fair values computed for examples A to D on page 135. For the first five years, while the end of corporate operations is below the horizon, the trend of market values runs parallel to book values (i.e., if the bottoms of successive dividends were connected, the slopes of the resultant lines would equal the respective expansion rates). The yield lines, however, do not run parallel to the earning lines of the book-value curves. Each market-value curve has its own yield-slope, which means that each investment has a different yield (see below, page 138).

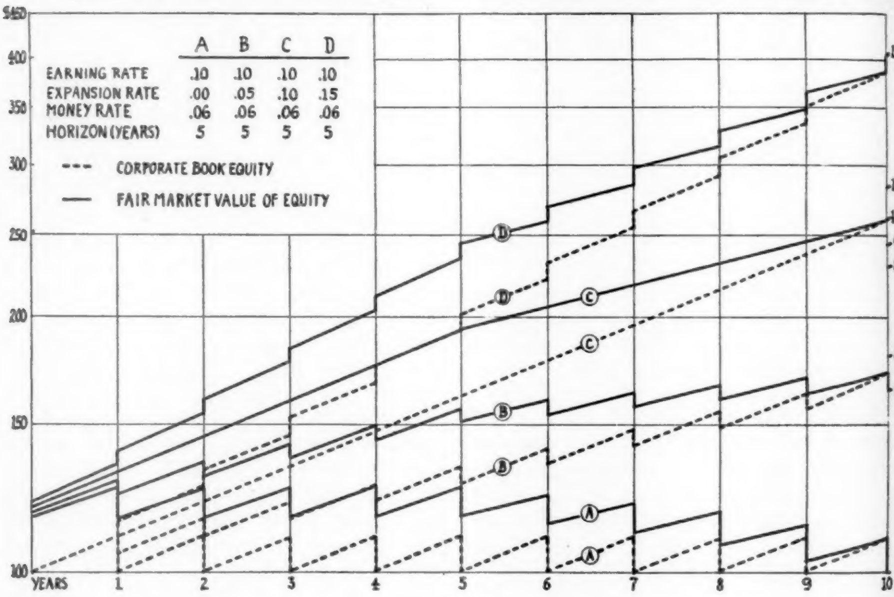

Fig. 4

Fig. 4 presents the four examples graphically on a semi-logarithmic chart covering a period of ten years, at the end of which it is assumed, for the sake of illustration, that the four companies will actually liquidate. Of these ten years of corporate operations, however, the investor's vision extends only to the five years next ahead at any given date.

The book-value curves drawn as dotted lines start from the common origin of \$100

For the second five-year period all the different yields are reduced to the money rate, corresponding to the principle stated on page 131. This causes a convergence toward the respective book-value curves, until each

[5] This definition of the long-term trend is the starting point for investigations into cyclical problems arising from the more or less regular fluctuation or change of the elements here considered constant.

pair meets at the end of the tenth year, when liquidation takes place.

It should not be assumed from the foregoing that the dividends (positive or negative) used in the examples are the only ones in the respective circumstances which conform to the principle of good management. There is an unlimited range of equally correct ways, of which only the simplest was illustrated. Distributions may be classified with respect to their effect into three main groups:

1. Dividends in cash, property and evidences of indebtedness decrease corporate net worth;
2. Stock dividends leave corporate net worth unchanged;
3. Rights increase corporate net worth, if they are exercised.

The dividend policies assumed in examples A to D may therefore be supplemented by the declaration of stock dividends at any rate desired and also by any combination of cash dividends and subscription rights so calculated that their offsetting effects will reduce to the assumptions made in the examples. Furthermore, the value of a right equals the value of the subscription privilege only if the subscription price of a share equals its corporate book value. Rights entitling to subscription at lower or higher prices combine the effects of positive or negative stock dividends with those of pure rights.

If the investor exercises all rights and refrains from selling any of the stock dividends received under such an alternative distributive policy, Fig. 4 remains unchanged, since it shows the evolution of the total investment, irrespective of the number of shares which may represent it at different times. If, on the contrary, he sells such distributions, he will reduce the expansion rate of his investment and receive compensation therefor in the form of a higher stream of "actual services." A profit or loss will in addition result from such transactions, whenever the daily market quotations are above or below the long-term trend (capital value) of the investment.

Distributions not conforming to the preëmptive right of stockholders fall into the same three groups as those conforming thereto. They accordingly affect the corporate book value curve in the same manner. As for the investor, the difference is that he receives no compensation for the reduction in the expansion rate of his investment. To the extent that the intention of making such distributions is known in advance, market values will be lower. Unless distributions contrary to the preëmptive right save at least their equivalent in operating expenses (for instance when bonus shares are given away to reduce the interest rates on a bond issue), they violate the principle of good management from the investor's point of view.

Just as there is an infinite variety in dividend policies conforming to the principle of good management, it is possible to imagine any number of policies offending against it in one of two ways: They will either dissipate the productive corporate capital, or they will accumulate more capital than can be used productively. In the first event, the investor will lose the difference between the yield and the money rate on the productive equity improperly distributed and in the second event he will lose interest on the funds unproductively hoarded in the corporate treasury. If the dividend policy is properly chosen, no such losses can result. Another important rule, therefore, is the following:

The yield of common stocks is not dependent upon the corporate dividend policy so long as that policy conforms to the principle of good management.

In the long run, this rule is subject only to secondary qualifications in so far as one kind of distribution may have a form-utility superior to another because it may be easier to dispose of, because it may create a smaller income tax liability, etc. Those, however, are individual considerations differing with each investor.

The concept of the *yield*, as used here, must, of course, be clearly understood. The term is frequently employed in a number of different senses. Sometimes it means the quotient of annual cash dividends over the

market price of the stock, sometimes that of corporate earnings over market values and sometimes even less significant ratios. In the sense of the mathematical analysis, upon which this essay is based, *yield* is the first derivative or instantaneous rate of change of capital value, divided by capital value. Shorn of technicalities, it is the annual rate of return of an investment, computed by adding the increase in its fair market value to the fair market value of the distributions received during the year and dividing that sum by the fair market value at the beginning of the year.[6] Thus the yield is for:

Example A $$.00+\frac{.10-.00}{1.1685}=8.56\%$$

B $$.05+\frac{.10-.05}{1.1852}=9.22\%$$

C $$.10+\frac{.10-.10}{1.2035}=10.00\%$$

D $$.15+\frac{.10-.15}{1.2235}=10.91\%$$

In Fig. 4 these yields may be determined graphically by drawing lines from the lower left hand corner parallel to the slopes of the yield-lines of each investment. The results are shown on the scale at the right of the chart. It should be clear from Fig. 4 that the yield formula is valid only so long as the end of corporate operations is below the horizon. To emphasize this limitation, it may be said that yields differing from the money rate can occur merely because errors are continuously made in the appraisal of investments. High-grade common stocks are, on the average, undervalued from year to year for fear that the unforeseen may happen, as it occasionally does. As soon as the information available is so accurate as to preclude error in the appraisal, the yield must fall to the level of the money rate. In the case of most well-known stocks, this contingency is still very remote.

If the dividend policy is not restricted to distributions or contributions of cash, the same yields can be derived from alternative computations indicated in the circumstances. Be it assumed, for instance, that for the first five years in Fig. 4 dividend policies are selected, which will keep both the corporate book value and the fair market value of a share of stock constant by increasing, at the respective expansion rates, the number of shares representing the original investment. This will mean for:

Example A

No change. Cash dividends of $10 each year yield 10/116.85 = 8.56%.

Example B

Cash dividends of $5 p.a. as before, followed each year by a 5% stock dividend, yielding (5 + 124.45/21)/118.52 = 9.22%.

Example C

Stock dividends at the rate of 10% per annum, yielding (132.39/11)/120.35 = 10%.

Example D

Either annual rights of 1:22@ $110 followed by a 10% stock dividend or annual rights of 1:6⅔@ $33.33. The yield in either event is

$$10.91\%=\frac{(135.70-110)/23+\left(135.70-\frac{25.70}{23}\right)\Big/11}{122.35}=\frac{(135.70-33.\dot{3}\dot{3})/7.\dot{6}\dot{6}}{122.35}.$$

It may be worth mentioning that a dividend policy maintaining the book value of a share (ex current earnings) constant would have enormous practical advantages for the stockholder without interfering in the least with legitimate aims and purposes of management. It would make the mystery of corporate earnings and distributions intelligible even to the most unsophisticated investor, because his original purchase would always be represented by the same number of shares. Anything else on hand, whether cash, rights or shares, would have to be the surplus accumulated since acquisition. This situation would prevail until the end of corporate productivity emerges upon the hori-

[6] This reduces to the general formula

$$\epsilon=x+\frac{r-x}{P}$$

where ϵ stands for the yield. The other symbols are explained in note 4.

zon, at which time he had best change to another investment.[7]

Additional light can be thrown upon the behavior of fair market values and yields by considering special cases. Some of the principal rules obtainable in this manner[8] are the following:

1. When the earning rate equals the money rate, the expansion rate and the horizon lose their significance. The fair market value of the investment will equal the book value and the yield will equal the money rate.

2. If the company is not expanding, the fair market value of $1 of corporate equity will be somewhere between $1 and the quotient of the earning rate over the money rate, depending upon the distance of the horizon. The yield will correspondingly be somewhere between those two rates. (The quotient of earning rate over the money rate is the value of a perpetuity, which can yield only the money rate.)

3. If the expansion rate equals the money rate, the goodwill or market premium commanded by the book equity equals the product of the excess earnings by the horizon. This is the rule of thumb often used for computing goodwill.

4. If the expansion rate equals the earning rate, the fair market value of $1 of book equity can be computed by compounding it at that rate up to the horizon and discounting it at the money rate back to the present. The yield will always equal the earning rate and is independent of changes in the money rate or the horizon.

5. Whether the expansion rate is higher or lower than the earning rate, the yield will always be between the two. But a decrease in the money rate or an increase of the horizon will enhance the yield when the expansion rate is higher and reduce it when the earning rate is higher (and vice versa).

6. When the money rate is very high, the fair market value of investments is very low. Whenever the money rate exceeds the earning rate, any horizon short of infinity will result in a yield lower than the money rate.

7. When the money rate is very low, the fair market value of investments is very high, and their yields correspond closely to their expansion rates.

8. When the visibility into the future is zero, market values will equal liquidating values, regardless of earning, expansion and money rates.

9. If the visibility into the future is unlimited and if the earning rate is higher than the money rate, an expansion rate equal to to or higher than the money rate results in an infinite fair market value. On the other hand, if the expansion rate is lower than the money rate, the fair market value equals the excess of the earning rate over the expansion rate, divided by the excess of the money rate over the expansion rate. The yield will equal the expansion rate or the money rate, whichever is higher.

In using these rules, it is essential to bear in mind that the base of the earning and expansion rates is $1 of corporate book equity, whereas the base of the yield is $1 of fair market value. This means that whenever an earning rate in excess of the money rate occurs in conjunction with an expansion rate, no matter how small, the stockholder's wealth increases by a greater amount than the amount earned by the company on the same block of stock. Thus in examples A to D all four companies make $10 on $100 while the four investors' wealth increases by $10, $10.93, $12.04 and $13.35 respectively.

This conclusion has often been denounced as a fallacy, although it merely states the evident fact that the privilege of converting market-dollars at par into production-dollars is valuable. Outsiders excluded from such a transaction are therefore bidding up the price of stocks entitling to the privilege. Fallacious conclusions are reached, however, if the yield is mistaken for earnings. Earning power is the principal cause of capital value, whereas the yield is merely its effect. If the corporate book equity be compared to a tree, capital value is its shadow. Reinvested earnings correspond to the growth of the

[7] For an exposition of this idea cf. note 3, pp. 60 and 64, *The Nature of Dividends.*

[8] By solving for special values the formulae given in notes 4 and 6.

tree, sterile earnings to the fruit and the yield to the lengthening of the shadow. To complete the simile, the horizon and the earning, expansion and money rates correspond to the sun and its rays. The slope of the rays determines the shadow without affecting the tree.

Whereas, in nature, no one can stand a shadow upright and make it cast another shadow, this feat has been made possible in corporate finance by permitting a company to hold stock in another. That is what a company does, when it claims that the yield of the stocks in its portfolio constitutes its own earnings.

In example D it was found that, in the circumstances assumed for illustrative purposes, \$100 of corporate book equity had a fair market value of \$122.35 and that the investor derived a yield of 10.91% or \$13.35 therefrom. By organizing a chain of holding companies, each of which owns no property other than the stock of its predecessor in the chain and by keeping each company's stock recorded at its market value on the books of its parent, it is temporarily possible to inflate the market value of the *n*th company's stock to the *n*th power of \$122.35, at which level it will apparently yield \$13.35 to the *n*th power.

The structural flaw in this pyramid is, of course that separate legal units are masquerading as separate economic units, although the whole chain taken together represents no more than the operating company alone. The holding companies are scraps of paper, nothing more. Pursuing this thought to its logical conclusion, it will be found that ownership by a company, of another company's stock is meaningless; symbols of legal ownership interpolated between a productive capital good and its ultimate natural owner can have no substance. Any attempt to consider such empty symbols as original instruments of production will lead to inflation whenever the yield is higher than the money rate.

This principle is recognized in the preparation of consolidated financial statements, but the recognition has only a limited effect, because such statements are prepared only for affiliated groups subject to a single control. The principle applies with equal force in the absence of control, from investment trusts on down to the last few shares acquired by a bona-fide operating company for the temporary storage of excess cash. An element of inflation is therefore included in the market quotations of many common stocks, but is most pernicious in the case of investment trusts, where the so-called "leverage effect" is sometimes enormous. The market value of such a stock accordingly rises or falls by a multiple of the rise or fall in the market value of the securities held in the portfolio.

The investor would do well to remember that buying stocks in the market amounts to buying shadows, the length of which depends upon the sun as much as upon the tree. It is all the more important for him to ascertain whether he is buying the shadow of a tree or merely the imaginary shadow of a shadow.

SOME PROBLEMS IN GOVERNMENT ACCOUNTING

Paul M. Green

Government accounting has been considered as a thing apart from the general field of accounting by many teachers and by many practitioners. Following the lead of such pioneers as Hatfield and Sprague there has been a rapid development of accounting literature. Textbooks have come from the presses at an increasing rate year after year. At the present time, the teacher offering a course in almost any branch of accounting has a wide choice of text material, readings, and problems from which to assign selections for his students. The important exception is found in the field of governmental accounting. As students we were given very little material concerning accounting for other than private agencies. As teachers we were hard put to find material for presentation to our classes which would open the doors to the problems of public agencies. As practitioners we assume that accounting for public bodies has its own peculiar rules which apply in no other place and act accordingly.

In recent years a start has been made toward presentation of accounting method to be used by governmental agencies. Professor Morey has contributed substantially in his series of treatises upon the problems encountered by the accountant for the government. In the latest edition of his fine work, Professor Finney has added a chapter on Public Accounts.[1] Other writers have contributed by way of books and by articles in periodicals. There seems to be a movement toward a better presentation of that part of the accounting field which the profession has chosen to call government accounting. However, most writers on the subject explain that government accounting is more or less a distinct branch of the science and should be considered as such. Definitions which are considered correct in the commercial and industrial field are no longer accepted when the question relates to procedure in governmental agencies. Professor Finney presents a definition of a fund, but qualifies his statement by a footnote to explain that such a definition must not be considered proper when municipal and institutional accounting are concerned.[2]

The problem facing the accountant in the service of the Government today is one which cannot be solved without turning to the whole body of accounting information. It is impossible for the government accountant to retire to his cloister with the assurance that a good memory of the proper form numbers and the appropriation against which a particular item should be charged will suffice to solve any problem which may come his way. No longer may he cast aside such items as the balance sheet and statement of profit and loss as having no place in his scheme of things. In no place is the variety of accounting problems to be solved expanding faster than in the offices of the accountants in the employ of the Federal Government.

There are many reasons for this expansion of the functions of the government accountant. For convenience they may be grouped under two heads, to wit:

1. Volume of Business
2. Nature of Business

When the present accounting system of the Federal Government was established, the majority of the activities of Federal agencies were carried on in a small number of buildings in Washington, D.C. These were conveniently located and a high degree of centralization existed. The number of agencies in existence was relatively few. The operating organizations formed a rather compact and simplified structure.

Expansion has occurred in several ways. Within the District of Columbia the government offices have expanded until they are housed in all types of available space. Many new buildings have been constructed and

[1] *Principles of Accounting*, Vol. II, Advanced, Ch. 58.

[2] *Principles of Accounting*, Vol. I, Intermediate, p. 369.

many more are in process or contemplated; yet the pressure of government offices for space continues. Not only has this expansion occurred at the capital city, but the rapid growth of the government's activities has resulted in the establishment of Federal agencies in cities throughout the nation. Resettlement Administration, Federal Housing Administration, and the various relief agencies, are but a few of the examples of divisions of the Government with offices throughout the United States and its possessions. Such a growth of governmental activity has increased the accounting problems many fold.

The system of accounts in use by the Government was adopted when the major part of government functions involved no more than purely administrative operations. With the rapid growth of governmental activity administrative operations became merely a part of a much wider scheme of things. Present day activities extend beyond administrative functions. Supervision and regulation of private agencies have been developed. In some cases the Government has carried forward its operations through the corporate form of entity. Studies as a basis for operating procedure have been developed.

A Department may continue to operate without any great variation from its former procedure. The accounting functions it performs are of an administrative nature. Supplies are purchased and payrolls are met with regularity. Its program may remain much as it has been for many years, and the accounting problems resulting therefrom are much the same as they have been in the past.

On the other hand, some governmental units supervise the operation of private agencies. The Federal Deposit Insurance Corporation is interested in activities of banks in which it has underwritten the deposits. The Federal Housing Administration supervises the operating policies of low cost housing projects erected with the aid of loans insured by it. Such activities give rise to the accounting problems which are encountered by the accounting staff of the private organization. If adequate supervision is to be accomplished, the government accountants assisting in such supervision must be cognizant of the accounting techniques employed by the private agencies. The problems of the organization become the problems of the Government, and the accountant in Federal employ cannot overlook them.

In the discussion following a paper[3] prepared for the joint meeting of the American Association of University Instructors in Accounting and the Teachers of Business Law in Collegiate Schools of Business by the writer in 1932, the question of federal charters for corporations was raised. At that time there was no provision for Federal charters. Since then acts have been passed which permit charters to be granted by Federal agencies. Supervision of such organizations furnishes additional problems for the government accountant.

Messrs. H. F. Taggart and Orton W. Boyd in their articles[4] have pointed out how the accountants in the employ of the National Recovery Administration were forced to consider the many problems of cost accounting in determining prices to be used by various manufacturers to avoid unfair competition. Although this division of the Federal Government has been discontinued, many of its problems will become the problems of other units.

Since many of the functions of Federal agencies relate to long time programs the accountants for such divisions are often forced to develop plans for studies of an accounting nature which are not generally found in business organizations. Many times such studies have been considered outside

[3] Preserving the Benefits of the Holding Company, The Accounting Review, Vol. viii, No. 1, March, 1933, p. 51.

[4] H. F. Taggart, "The Relation of a Cost Accountant to the N.R.A. Codes," The Accounting Review, Vol. ix, No. 2, June 1934, p. 149.

Orton W. Boyd, "Uniform Cost Accounting Systems Under the N.R.A.," *The Certified Public Accountant*, Vol. ix, No. 2, June 1934, p. 149.

H. F. Taggart, "The Uses and Abuses of Accounting for N.R.A. Purposes," *The Certified Public Accountant*, Vol. xiv, No. 12, December 1934, p. 729.

Orton W. Boyd, "N.R.A. and Destructive Price Cutting," *The Certified Public Accountant*, Vol. xv, No. 2, February, 1935.

the accepted field of accounting. Nevertheless, the government accountants with many of the Federal units at the present time must solve accounting problems which relate to such studies.

With few exceptions the problems of government agencies of the present time include the problems of accountants in private practice. Any of the organizations may be taken as an example from which to cite specific cases. Since the writer is more familiar with the Federal Housing Administration than with other divisions, a few specific problems of the government accountant as found in this agency will be discussed.

The National Housing Act provides for the insurance of mortgages. Section 205 states that all mortgages accepted for insurance shall be so classified into groups that the mortgages in any group shall involve substantially similar risk characteristics and have similar maturity dates. Premium charges received for the insurance of the mortgage and earnings from all properties taken over by the Administrator shall be credited to the group account. Principal and interest on all debentures issued for claims shall be charged against the group account. All expenses of operating properties and of collecting claims shall be charged against the group. A general reinsurance account has been established to absorb losses of any group which exceed the balance of the group account.

Two alternatives are available for the dissolution of this account. When the balance of the group account exceeds the unpaid balance of the mortgages assigned to the group, an amount equal to ten per cent of the premiums credited to the account shall be transferred to the general reinsurance account and the remainder shall be paid to the mortgagee for the benefit of the mortgagor for the purpose of canceling the unpaid balance of indebtedness. If the balance in the group account does not exceed the unpaid balance of the mortgages assigned to the group, by ten per cent of the premiums collected, by the beginning of the final year before the maturity of the mortgages in the group, dissolution shall occur at that time. Ten per cent of the premiums paid shall be transferred to the general reinsurance account and the remainder shall be distributed to the mortgagees for the benefit of the mortgagors.

The accounting problems raised by this section of the Act are several. There is room for considerable variation in the interpretation of the law which will have a bearing upon the accounting procedure to be established. There is little question that the accountant is required to classify the mortgages into groups of similar risk characteristics and similar maturity dates. When the groups have been established, they may be liquidated in either of two ways: first, when the balance in the group account exceeds the outstanding balance of the mortgages in the group by ten per cent of the total premiums paid; and, second, when the balance in the account fails to reach the above figure one year before maturity of the mortgages, ten per cent of the premiums paid shall be transferred to the general reinsurance account and the balance, if any, transferred to the mortgagees for the benefit of the mortgagors.

The major accounting problem to be solved concerns the grouping of the mortgages. They are written for any number of years, not exceeding twenty. They may mature on the first day of any month. As a result mortgages being written at the present time may mature any month in the next twenty years. This opens the way for many methods of grouping the mortgages. The accountant in coöperation with the lawyer, must determine similar maturity dates. After this is determined, some decision in regard to the meaning of similar risk characteristics is in order.

Accounting would be simplified in some ways if all mortgages maturing in any one month were considered as one group and handled as such. The objections to such a grouping, however, are three. The law specifies *similar* maturity dates while all those mortgages maturing in any one month have the *same* maturity date. There is no assurance that mortgages written over a period of

twenty years will have similar risk characteristics simply because they mature in the same month. If a separate group is established for mortgages maturing in each month, a total of 240 groups will be necessary with the consequent increase in accounting detail. An alternative plan of grouping for the sake of simplicity would include all mortgages in one group. However, this would not gain the desired end. As a result, some intermediate plan must be worked out.

Approximately two years' insurance premiums are required to cover the expenses of underwriting a mortgage. As a result it seems desirable to include all one and two year mortgages, regardless of the year in which they are written, in a single group, this group to have no participation in any accumulated funds. Mortgages for a period of more than two years must be grouped by some method. Similar maturity date requirements might be obtained if all mortgages maturing within any single year are assigned to a specific group. However, this violates the similar risk characteristics clause of the Act. Defaults are less likely to occur after a mortgage has been carried through the early years of its life and the equity of the mortgagor has increased. The real estate cycle has an influence on the number and the time of foreclosures. These factors prevent the classification of mortgages with widely varying terms in the same group solely because they mature in the same year.

Some limitation must be placed upon the grouping of the mortgages other than maturity date. Relatively narrow limits must be established for entry into a specific group. The accountant must determine the limits of a reasonable period over which the risk characteristics remain relatively constant.

Once the grouping has been accomplished the accountant must decide how the accounts are to be maintained to accomplish the intention of the Congress when the Act was framed. When the group account is to be liquidated there may be a payment to the mortgagee for the benefit of the mortgagor under either of the two procedures outlined above. When the balance in the account reaches the amount necessary to qualify for distribution under the Act, the dissolution should occur. The ten per cent of premiums paid will be transferred to the general reinsurance account and the remainder will be paid to the mortgagees. This must be done by a payment for the benefit of each mortgagor of an amount equal to his unpaid mortgage balance. Since, similar, but not the same, maturity dates are found in the group, the mortgagors will have paid unequal amounts into the fund in premiums. Those who have paid the most into the fund need not have the largest unpaid balances. As a result of payment to the mortgagees on the basis of unpaid balances, mortgagor contributions to the group account and benefits to be received from the group account need not correspond. A similar situation may exist when the group account is liquidated at the beginning of the final year even though the balance does not cover the balance of unpaid mortgages. There are several alternative methods of adjusting the shares upon dissolution, of which space will not permit discussion here. The proper accounting to give expression to the Act and to provide justice to the mortgagors becomes rather involved.

The Act does not clarify the exact nature of the group account. From the wording of the passages mentioned above, the group account apparently represents an equity. There is no statement to the effect that assets must be segregated into distinct groups.

However, all properties taken over by the Administration and all debentures issued must be allocated to specific groups. If a property is sold at a net profit, this profit must be remitted to the mortgagee for the benefit of the mortgagor. If the property is sold at a loss, this loss must be absorbed by the group to which the risk has been assigned. When the group account is to be liquidated under either of the provisions for such action, the question of allocation and composition of the assets becomes significant.

The ten per cent payment to the general

reinsurance fund may be made in property if this becomes necessary. If the remainder of the fund contains other items than cash, the distribution to the mortgagor becomes difficult. It will be impossible to accomplish a satisfactory liquidation by issuing certificates of equity in properties, particularly when these certificates would be subject to adjustment at a later date depending upon the proceeds of the sale of the property. The strict fund theory would force the maintenance of the major share of the assets in the fund in the form of cash, even at considerable sacrifice in the selling of the properties.

Opposed to this position is the interpretation of the law to require the group accounts to be established as equities without a segregation of assets into funds. This position will simplify the problems of the accountant in charge by permitting the intermingling of the assets of all groups. Since the groups mature at different times there will be much less pressure for the sale of properties. As long as the total assets supporting all group accounts include cash to liquidate any one of the groups, the accountant will have a simple problem.

If this latter theory is adopted, a problem remains in accounting for properties taken over. While the assets themselves need not be segregated as to groups, all receipts and expenditures connected with the properties must be accounted for in the proper group accounts. The problem involves the proper interpretation of the asset and equity accounts and the proper allocation of receipts and expenditures resulting from the composition of the assets.

Section 207 of the National Housing Act provides that the Administrator may insure mortgages "covering property held by Federal and State instrumentalities, private limited dividend corporations, or municipal corporate instrumentalities of one or more states, formed for the purpose of providing housing for persons of low income which are regulated or restricted by law or by the Administrator as to rents, charges, capital structure, rate of return, or methods of operation." Upon this section of the law the large scale housing program of the Federal Housing Administration is based. The accounting problems which arise from such program are many and varied.

The internal accounting which must be done by the Administration is no greater than that necessary to record operations under the other phases of the mutual mortgage insurance plan. The main problems which must be solved as a result of this part of the program arise from the provisions made for supervision of the instrumentality operating the project.

Proper supervision of these projects can be obtained only by the use of adequate and comparable accounting records. Less than this would not provide information for reports to the Federal Housing Administration which would serve any useful purpose. To gain the necessary end the decision was reached at an early stage that a uniform system of such accounts should be designed for the use of the large-scale housing projects. This problem would have been much simpler if one could foresee the functions these housing projects were to serve. Only one point was certain. They were all to provide shelter for persons of low income. Beyond this, accurate forecasting became impossible.

These bodies may be public or private agencies. If public organizations they may be controlled by the Federal, the State, or the municipal government. The type of net worth accounts needed to record the residual equities in such properties is problematical. The organization may borrow funds to cover the cost of constructing the building. These funds may be advanced on a mortgage, on a series of notes, or on an issue of bonds. Liabilities may take any form, and accounts must be provided for recording properly the type of obligation which is chosen in each of the several cases.

The buildings constructed by the project may take any one of several forms with the consequent increasing of attendant accounting problems. At one extreme may be found the project with a thousand or more individual single family houses. At the other extreme may be found the ten million dollar

apartment house, a city in itself. Intermediate types may develop several buildings, a series of row houses, or a combination of apartment houses and single family homes. No accurate prediction may be made regarding the form in which the assets of the organization may be set up. In itself this presents no problem of more than passing significance. More difficulty is found in attempting to provide revenue and expense accounts suitable for the several types of projects permissible under the Act.

While all the projects will afford shelter to their tenants, they may not duplicate the additional services of each other. Any one of the projects may have room for stores, for offices, and for shops. A wide variation in methods of operation is possible. The same situation applies in the case of restaurants and cafeterias. In cases in which the project owns and operates the commercial units the accounting needs are quite different from those where no commercial activities are planned. Utility services may be supplied in any one of a number of ways with a consequent variation in accounting needs.

If the project is composed of many detached houses, there is no certainty that heat will be furnished. If the apartment-type structure is used, in all probability heat will be furnished as part of the services rendered to tenants. Some units will install elevators while others will not. In those projects using the elevators there may be disagreement in regard to the use of manually-operated equipment or automatic lifts. As a result elevator expense in one type of unit will not cover the same items that it does in another. Variations may occur in the method of garage operation and accounting needs will vary with the type of installation and plan of operation.

Dwelling units may be rented unfurnished or they may be supplied with furniture to be rented to the tenants. When the latter situation exists it seems desirable to segregate the rent earned by supplying such furniture. Many services may be furnished in some projects which will not be supplied in others. Maids may be available; nursery and play rooms may be supplied. A kindergarten may be located in the building. Provisions may be made for producing plays and for supplying facilities for various types of social gatherings.

The problem raised by these many variations which may be found in the several projects concerns the establishment of income and expense accounts. The main incomes of the unit will be derived from selling the use of space and attendant services. Income accounts may be established for recording revenues with a reasonable breakdown into the different types of rent. The supplementary incomes are difficult to provide for, since it is next to impossible to supply accounts to cover every conceivable form of such income. A better procedure includes provision for a group of accounts to be called "Service Incomes" with the breakdown of the group left to the management of each organization.

A parallel situation exists in regard to the expense accounts. To present a list of reasonable expenses for the entire group of projects would approach the impossible. However, a breakdown of expense accounts for the operation of the housing unit may be made. This will exclude the many supplementary items which may arise. A group may be established labeled "Service Expenses" with the breakdown being left to the management of the unit.

The accounting system thus worked out will be subject to revision with the passing of time, as more is learned concerning the accounting needs of the organization. The system to be used should provide a maximum amount of material for reporting to the Federal Housing Administration with a minimum of additional trouble and confusion to the reporting agency. A uniform system of accounts for these projects has been designed and the installation at the first of them to start operations has been completed. This unit is being used to some extent as a laboratory to test the accounting installation. As more is learned about the accounting requirements of the organizations and as weaknesses appear in the system the necessary changes will be made.

The Federal Housing Administration en-

countered the problem of determining the rental rate for a housing unit necessary to cover the costs which must be met. For the development of any housing program it is necessary to determine what can be done toward lowering rentals with various combinations of cost factors. This became a problem for the accountant.

There are several factors which may influence the rate at which housing may be supplied. The cost of land on which the building is to be constructed must be considered. The construction cost of the building is important. The percentage coverage of the land by the building will have its effect on the final rental rate. Since rentals are usually considered on a per room basis the number of square feet of floor space to the room becomes a factor.

The method of financing the project is important as is the interest rate. The tax rate must be considered. The operating costs of the finished structure are important. The dividend rate and the rate at which federal income taxes must be paid are other variable factors. The Administration was forced to combine these several variables into some form of accounting statement to determine the rental rate for any given combination of factors.

With a number and a range of variable factors the accounting problem of determining the rate at which structures should rent becomes of more than passing importance. The great number of possible combinations forces the accountant to prepare a series of statements to support his rent determination or to find another method for obtaining results.

After the preparation of several statements to show the minimum rent which must be derived from a given project to cover the necessary outlays, the necessity for some shorter method became evident. Resorting to a series of tables proved inadequate. As a result some time was devoted to the preparation of a computing chart which would combine any desired set of factors into a rental rate sufficient to cover the outlays of the project. The finished chart was a combination of four parts. The first section combined the cost per square foot of land, the number of stories in the building, and the percentage of land coverage into a cost per room for the land, assuming the average room in a development of the type in question to contain approximately two hundred square feet of floor space.

With the cost of land per room determined by the first section of the chart, it was only necessary to pick up the construction cost per room for the structure in question in the second section to read the total capital cost per room for the completed structure at the completion of the second part of the chart.

The third section considered the method of financing the project. It not only brought in the percentage of total capital to be borrowed, but also the length of term of the mortgage and the plan of reduction of mortgage principal. The interest rate was considered as were the rates for real estate taxes, dividends, federal income taxes, mortgage insurance premium, and an allowance for vacancy in the completed structure. This section combined these factors with those derived from the former sections into a rate per room per month which would be necessary to cover all outlays which were called, for the lack of a better name, "Capital Charges." In other words, the rate per room derived at this point was sufficient to cover all outlays which could be based upon investment. It omitted only the necessary expenses of operating the building.

Section four of the chart was designed to add this final factor, the operating expense per room per year. Two things were necessary at this point: the operating expense per room per year must be reduced to a monthly basis, and an allowance must be made for vacancy to translate the figures into a factor to be included in the rental rate. With this done the final section of the chart read into a scale which gave the rent per room per month necessary to cover the charges for the project including the reduction of mortgage principal and the payment of dividends. After the chart had been tested a number of times against independent calculations of engineers and accountants it was printed in

the October 1935 issue of *The Architectural Forum*.[5]

While the use of the chart to supplement the accounting work on the subject apparently reduces the determination of the rental rate to a semi-mechanical process, this may be done only because several accounting problems were considered. These were found, for the most part, in the development of the third section of the chart, that dealing with the method of financing and related items.

As the National Housing Act is written the organizations operating housing projects of the private corporation type must be regulated as to dividends. It is important to note that the regulation applies to dividends and not to earnings. There are several factors dependent upon this statement. Dividends are established at some rate, usually between four and six per cent of the capitalized residual equity. The organization is not permitted to borrow funds other than the original amount which is insured by the Federal Housing Administration. The only source of funds available to the corporation is the collection of rentals and fees for various miscellaneous services which it may render. The cash provided by these sources must be sufficient to meet current outlays, regardless of what they are, if the project is going to be able to avoid default upon its obligations.

A properly financed project will have a yearly reduction of indebtedness greater than the amount of depreciation of the structure and equipment. As a result of this the accountant's computation of the rental rate necessary to permit the project to operate successfully must include amortization of the indebtedness instead of depreciation of the properties. In other words, if the rental rate is established at a figure which will permit the corporation to cover depreciation and meet all operating expenses, including interest and taxes, with allowance made for federal income taxes and dividends, the project will show earnings of an amount equal to its dividend requirements. However, it will soon run into financial difficulties caused by a lack of cash to meet its amortization payments.

Since the controlling factor in this situation is the greater of amortization or depreciation, the properly financed project must operate on a rental schedule which will permit it to meet the periodic payments on its indebtedness. Year by year it must be permitted to earn an amount over and above its dividend requirements equal to the excess of its reduction of indebtedness over its depreciation charges. The stockholders of the corporation must increase their equity by an amount equal to this discrepancy. As a result, surplus, or surplus reserves, must accumulate at a rate equal to this difference. In the statements which the accountant prepares the amortization figure must be included in place of depreciation.

An estimate of federal income taxes is complicated by this situation. These taxes will be based upon the net earnings of the corporation and established at the rates prevailing at the time. The Bureau of Internal Revenue will not permit the deduction of amortization, but depreciation may be deducted. The taxes to be paid will be dependent upon many variables and an accurate computation of their amount becomes very difficult. For practical purposes they may be computed on a figure which will cover tax and dividend requirements. Such a figure is subject to the error resulting from omission of the difference between amortization and depreciation amounts.

Such a method may be used to advantage by the accountant for obtaining results for any one of the years of the life of the project. If one wishes to get a sufficient basis for an estimate of probable results of the operation of the project, some information must be available concerning the trends which the various influencing factors may follow. The accountant is forced to go beyond the strict boundaries of his field in attempting such a study. Several men are being sent into the larger cities to obtain the operating results of housing companies. These men will be equipped with schedules designed to bring the operating experience of the apartment

[5] *A Workable Rental Formula*, p. 443.

houses and similar projects into agreement with the uniform system of accounts which has been adopted. An attempt to obtain figures for five hundred or more projects will be made. If this attempt proves successful more intelligent accounting statements may be prepared for analyzing a particular project. To the accounting method which has been developed for use in any given year will be added a technique for bringing these years together and for analyzing the problem without breaking it down into parts.

In summary, we all have much to learn from our fellows. The government accountant, the accountant with the private agency, and the accountant in public practice should recognize their fields of service as not distinct. Our form of social organization has advanced to the point where the problems of one become the problems of the others. The coming of accountants from public practice and from teaching to the government service has been a factor in the recognition of common aims.

The accountant has much to learn from practitioners in other fields. He will do his work better if he is quick to adopt the helpful suggestions of the economists, the finance men, the engineers, and others. Our accounting has grown to the point where it comes in constant contact with other fields of knowledge. We should not fail to draw on the experience of these fields when we have the opportunity.

Finally, the accountant and the lawyer should coöperate to the best of their abilities. The accountant in government employ is well placed to understand this need. Better written laws will cause less trouble to him when he attempts to establish accounts to express the meaning of the law. Better accounting should assist the lawyer in his work of writing and interpreting the law. Without doubt the problems of both accountants and lawyers may be simplified if these professions coöperate closely.

In our classes in accounting we should teach the close relationship to law and to the other fields. In our classes in law we should teach the place of accounting in legal work. Not all our schools have recognized the close association of these branches of our knowledge.

We cannot, and should not, expect to prevent an increase in the problems we must solve; but we can, and should, aid in the preparation of men and women better able to solve not only the problems of government accounting but the many related problems as well.

ACCOUNTING IN A LIBERAL ARTS CURRICULUM

Stanley E. Howard

This subject recurrently appears on the programs of the Association. It presumably possesses some combination of the qualities of importance, difficulty of treatment, and vitality or hardihood. In an earlier paper, presented at the Washington meetings in 1929, the present speaker attempted a brief survey of the problem, or some of the problems, suggested by it.[1] Perhaps it was the thought of our President in arranging our present program that it would not be improper to allow another attempt to be made, a sort of "make-up" examination, if you please, even though the educational value of the examination of this type is subject to a considerable discount.

I think it may be assumed for our present purposes that we need not be concerned to defend the proposition that it is proper for the subject of accounting to be included in a liberal arts curriculum. Accomplished results eliminate the necessity and the propriety of assuming a defensive attitude on this particular point. Undoubtedly there are many liberal arts colleges and universities in the United States in which this subject is not offered, but there are many in respect

[1] "Accounting in the Liberal Arts Curriculum," Accounting Review, Vol. v, No. 2 (June, 1930), pp. 146–149.

of which an opposite statement is true. I think we need not be concerned to press the case for further introductions. That matter, it is thought, will take care of itself, if by actual demonstration it is made clear that accounting instruction is not merely something to be tolerated, but rather something which fills a real need, even to the point of making a positive and valuable contribution to the curriculum as a whole. Every subject in a curriculum should enrich it. To suggest such a test or standard or ultimate goal in the case of accounting is not to make it a special case, but to treat it as all other subjects should be treated. It would seem to be self-evident that, if accounting is to make its maximum possible contribution as a part of a liberal arts curriculum, those responsible for the attainment of this objective should give some serious attention to the question, "What is a liberal arts curriculum?"

At the Washington meetings in 1929 Professor Campbell of Knox College presented a very able and stimulating paper entitled "Accounting in the Curriculum of the Small Liberal Arts College."[2] I quote his concluding paragraph.

> Accounting is in the Liberal Arts College; it has struck deep root and is there to stay. It has inherent qualities which justify the position it now holds in the Liberal Arts curriculum, and it may be a factor in inducing changes within the College in the direction of a more frank facing of the situation regarding the problem of professional education.

In general I find myself in agreement with this statement. On the other hand I find myself somewhat unprepared to accept the implications of the reference to professional education. I do not think that the case for accounting as a subject making a contribution to a liberal arts curriculum is strongest when put in terms of professional education or of a possible revision of liberal arts curricula looking toward more professional training, as this expression is commonly accepted. It seems to me that the most valuable contributions which accounting can make toward the enrichment of a liberal arts curriculum are those which can be made within the framework of a conception of this curriculum which has little, if anything, to do with professional or vocational education. Should the introduction of instruction in accounting make a fundamental change in the character of a liberal education? Or should it, without making such a drastic change, contribute to make such an education more effective?

What is a liberal arts curriculum?

It seems to be easier to say what a liberal arts curriculum is not than to say what it is. In fact it is perhaps dangerous for an economist to attempt even a negative definition when there are available expert students of education, "professionals," if you please, to attempt such a definition for him. I venture to assert, nevertheless, that a liberal arts curriculum is not necessarily any particular list of subjects or courses. Webster says, defining "liberal arts," "In the Middle Ages, grammar, logic, rhetoric, arithmetic, geometry, music and astronomy. In modern times the liberal arts include the sciences, philosophy, history, etc., which compose the course of academical or collegiate education." Which, as to modern times and so far as concerns our problem, merely begs the question. As to the Middle Ages, few, it is thought would care to base a claim for accounting as a liberal arts subject upon the fact that Frater Lucas Bartolomeo Pacioli published in Venice in 1494 his *Sũma de Arithmetica, Geometria, Proportioni et Proportionalita*, with its Section IX, Treatise XI entitled *De Scripturis*. Mere antiquity is no "open sesame" to the treasure house of educational values. The rapidity of recent social changes makes it quite impractical to classify curricula as liberal or non-liberal solely on the basis of their subject-content. Therefore, when I speak of accounting as possibly enriching a liberal arts curriculum within a framework which does not include professional education, I do not mean a rigid framework set by any generally approved list of subjects, time-honored as such a list may be. A liberal arts curriculum need not, and probably can not, be static.

I venture to assert also that by common acceptance hitherto a liberal arts curriculum

[2] *Ibid.*, pp. 142–145.

has been regarded as one that is not specifically vocational or professional in its objectives. So clearly does this appear to be so that, if professional education should come to function where liberal arts programs have hitherto held sway, it might be proper to ask whether the liberal arts college and liberal arts curricula had not disappeared.

In the consideration of this question some discrimination must be exercised. When Jacob Fugger the Rich went as a young man to Venice to serve his business apprenticeship and later returned to Germany taking with him, among other attainments, a mastery of Italian bookkeeping, he presumably was not interested in the liberal-arts aspects of the study of accounting. He frankly used what he had learned to acquire wealth and to become the financial master of princes and emperors. Even in our modern liberal arts colleges and universities there may be prospective or potential Jacob Fuggers. There may be others, perhaps many of them, who think they are such, or whose fathers and mothers think they are. There are probably even more whose fathers join with them in thinking that it is about time to elect some course which sounds as though it would turn out to be "practical," in the sense that in a year or so it may help in the getting and retention of a "job." Other students are intending after graduation to attend law schools. They have probably been advised, and it would appear correctly, that a knowledge of accounting is a most valuable asset to the student of the law, to the practicing lawyer and to the judge; but that the law schools can not undertake to give instruction in this subject. Few deliberately intend to become bookkeepers. Occasionally there are students who have or later develop an interest in professional accountancy. Does the presence of such students as these, even when their personal, individual objectives are definitely vocational or professional, cause the accounting course to be such, or cause the curriculum as a whole to lose its liberal arts character? I think not. Does the mere fact that much of the work of what has passed for the liberal arts curriculum serves helpfully, but incidentally, in the laying of pre-professional foundations cause the curriculum to be non-liberal? I think not.

In my view a curriculum is to be classified as liberal or non-liberal primarily on the basis of the objectives of those who plan it, administer it and teach in it. I prefer to consider that a liberal arts curriculum is one that is planned with non-professional, non-vocational primary objectives. A conservative department of art emphasizing the history of art and its appreciation does not become a professional school because it introduces its students to certain aspects of the techniques of drawing, painting and sculpture, or because experience shows that those of its graduates who later become professional artists find most valuable their undergraduate introduction to the historical backgrounds of their art. Our literary departments do not qualify as professional schools merely because their courses in dramatic art are found to be invaluable by some who later become playrights. A department of chemistry participating in a liberal arts curriculum is to be distinguished from a school of chemical engineering. Departments of chemistry and biology may coöperate in offering work which is indispensable to prospective medical students, but they do not thereby, in my opinion, qualify as professional schools. A department of economics is not to be confused with a school of business or of commerce. It is not the primary function of a department of economics to train men for successful, privately acquisitive business careers.

Please do not misunderstand me. I would not think of saying anything which would reflect unfavorably upon professional or vocational education as such. I have only the highest respect for it. My position in the present connection is that a truly liberal arts curriculum is not professional in its primary objectives, and that there is a valuable function for accounting instruction to serve in a liberal arts curriculum as thus conceived.

I take it to be a recognized and approved objective of a liberal educational program that its immediate beneficiaries shall be helped to understand the civilization in

which they live. In the liberal arts programs of the not too distant past we know that a great deal of emphasis was laid, and properly, upon the value in this connection of a familiarity with and understanding of the literatures and history of the civilizations of the past. I quote with sincere approval two sentences from the latest annual report of my colleague Professor Duane Reed Stuart, chairman of the Department of Classics of Princeton University. "The manifest duty of teachers of the classics is to transmit to as wide a circle of recipients as will in these days present themselves the many points of contact between classical antiquity and the later world. No less illuminating are the contrasts between ancient ideas and those of modern times." Teachers of accounting can likewise contribute to the enrichment of the curriculum in the liberal arts. We could do many things less useful than to take Pacioli's Treatise into the classroom. Quite apart from the fact that Pacioli's method of development of his subject is sound and clear, what he has to say throws light upon the economic organization and spirit of the era in which he lived. See, for example, his treatment of the general inventory, in which there is emphasized the contemporary lack of standardization of the currency, his discussion of the practice of the public authentication of the books of account on the occasion of their being opened, and his discussions of procedure involved in the relations between merchants and the public chambers of loans in Venice, of the formation of business partnerships, and of the use of bills of exchange. Dr. Elizabeth Grier of Columbia University in her recent book entitled "Accounting in the Zenon Papyri" has most ably demonstrated the value of a knowledge of accounting technique as a key to the interpretation of an ancient civilization.[3] Professor Littleton of the University of Illinois, in the writing of his book "Accounting Evolution to 1900," has rendered a most valuable service not only to specialists in accounting but to all interested in the evolution of society in its economic aspects. We live today in a highly capitalistic economy of which private property, the seeking of profits, and the private acquisition of wealth are dominant characteristics. The business man and the business corporation occupy a central position in this economy. Accounting records are in large part the records of this aspect of our civilization. The method of their use reflects some of the spirit and indicates some of the serious problems of our time. Double-entry bookkeeping is something more than a tool for the business man, a system of shorthand or a system of notation by arrangement or position of entries, whereby the initiated may record, read and interpret the course of sordid business events. It is in a sense the language of that part of our civilization which we call the business world. It may be that our profit-seeking economy will undergo drastic changes, or even disappear. If so, it is not inconceivable that the accounting record may be found to contain a key to the explanation, giving to us or to our successors a tale of improperly computed costs, unfair competitive practices, distorted views of the wages of corporate management, and socially unwise dividend policies.

I take it to be another generally accepted characteristic of a liberal educational program that strong emphasis is placed therein upon preparation for the public-spirited and intelligent exercise of the privileges of citizenship. This is very closely related to the matter just previously discussed, the objective of inculcating an understanding and an appreciation of the civilization in which we live. It is also the definitely positive phase of the idea that is inherent in the negative proposition that the objectives of a liberal arts program are not specifically professional. Accounting is, to repeat, not merely the tool of acquisitive enterprise; it is, and may in even greater degree than at present, be a tool for the social control of enterprise, in the interest of enterprise itself and of that vague but omnipresent and important group known as the "general public" whom, under the doctrine of economic harmonies, private enterprise is supposed to serve. Many of the most important problems

[3] Published by the Columbia University Press, 1934.

of public policy which today confront us are economic problems, in which the formulation and administration of policies looking toward solution require the understanding and use of accounting principles and accounting procedures. Accounting instruction in the liberal arts curriculum may serve not only to provide a solid foundation upon which the later training of experts may be built, but also an informed electorate whose presence can provide effective support for those who through the holding of public office are directly responsible for what governments do in the carrying out of policies of social control. The opportunity for rendering this service is enhanced, if in the curriculum there is a close liaison with the courses in economics. Through the latter there is constantly being impressed upon the student the social significance of the phenomena which are studied. And, on the other hand, a close liaison effected through the interlocking of courses and of personnel in a common curriculum permits the accounting approach to permeate courses others than those which are formally listed as courses in accounting. Courses in corporation finance, public finance, and banking, for example, may often have their effectiveness enhanced by the introduction of accounting explanations and the use of a staff of instructors familiar with the fundamentals of accounting principles and technique.

It appears to be a generally accepted view that a liberal arts curriculum should be a balanced one; that the educational plan and the facilities for study shall not be one-sided or otherwise of distorted proportions. The pendulum of academic styles has swung back from the extreme position of the wide-open free-elective system, so that we normally find requirements imposed which apportion the work of the individual student among several general fields of study, as for example the humanities, the social sciences, and mathematics and the natural sciences. The advisability of some specialization is usually recognized, with the result that we have "major" and "minor" subjects, or departmental and non-departmental courses, or "honors work" and "pass courses." Nevertheless the requirements of diversification place upper limits upon the amount of specialization which may be attained in any one subject. The most recent tendency seems to be to emphasize not the amount of specialized work but its quality. The requirements for the bachelor's degree, in such a system, set a minimum standard of performance which is higher for the majors than for the minors, and for the departmental than for the non-departmental work.

This means that in any field or department or subject the planning of the work to be offered must be very painstaking. It is necessary to select for attention those topics which are in the strictest sense elementary and fundamental, to the exclusion, it may be, of much material which in itself is both interesting and valuable. The treatment must be compact, and frequently the necessity for compactness of treatment means greater difficulty for both teacher and student. This is peculiarly true in the field of accounting. It seems to be typical of the liberal arts student as he approaches his first course in accounting that his knowledge of business practices in general and of bookkeeping in particular is most meager, almost to the point of being non-existent. The fulfillment of traditional requirements for college entrance has rather fully occupied his time and attention, and his business contacts, if he has had any, have been brief, casual and intermittent. If he has a smattering of information as to how books of account are kept, it is just that. Perspective on the whole process is quite lacking. The not infrequent comment of the beginning student in accounting, in so simple yet so elementary and fundamental matter as the meaning of debit and credit entries, is that all this that the instructor says or the textbook sets forth is just the opposite of what had previously been understood to be the facts. The instructor must, therefore, begin at the beginning. But he can not go slowly, because time is lacking. He cannot give much time to mere description, nor can the student take time for learning by the process of frequent repetition. In brief, the instructor must demand from his students, as dip-

lomatically as possible, an intensiveness, rapidity and efficiency of effort which will put to a real test both their interest and their capacity for the mastery of difficult concepts.

This suggests another characteristic or objective of a liberal arts program, that of developing in individual students, without discrimination as to the fields of study in which they register to do their work the maximum degree of mental power. This consideration, as well as that of individual, personal interest, underlies programs of study which permit or require a certain amount of specialization. Students are allowed or required to follow programs of specialization not simply because thereby they may do what they like to do, but because, it is thought that upon the foundation of special, individual interest it is possible to build a superstructure of well developed powers. Instruction in accounting may therefore most appropriately be directed with special emphasis to the stimulation of the mental processes, to the encouragement of independent thinking, and to the development of ability to apply fundamental principles to new combinations of facts. Our work as teachers should not be merely expository and descriptive. Perhaps we should not seek controversy, but it does not seem appropriate to avoid it when it lies in the middle of the road. Orthodoxy has its place, and perhaps there is some virtue in the saying that sometimes it may be wise to err with the ancients. But it may be that the virtues of orthodoxy in the classroom and in the market place are subject to differing evaluations. Orthodoxy should be understood, but it is fairly obvious that orthodoxy is not a mental stimulant. We should not, it seems to me, hesitate to discuss, even with our beginning students, controversial questions of procedure and interpretation whenever they arise. A liberal arts student of the largest caliber will not be willing to accept without discussion the orthodox rule that inventories of stock-in-trade should be valued at cost or market whichever is the lower; or the conservative doctrine that while estimated depreciation of fixed assets should always be recorded, estimated appreciation of such assets should never be booked. It may be very much worth while to impress upon undergraduate students the difference between the requirements of business conservatism and those of cold logic.

Some of the conditions and considerations which have been set forth in this brief discussion make it quite obvious that the quantity of work offered in the field of accounting in a liberal arts curriculum of the type that I have tried to suggest must be relatively small. This is particularly true if accounting is not recognized as an entirely independent subject, but rather is treated as one closely associated with and in fact a part of the curriculum in economics. To the teacher who becomes intently interested in this one subject as a specialty this is a cause, perhaps, for personal disappointment, because of the inability to pursue in the classroom the many most interesting problems which advanced study continually brings to the light. On the other hand the necessity for economy in the planning and administration of such courses as can be offered constitutes a real challenge. It is a challenge which must be met and dealt with in the light of local conditions and with such ingenuity as the teacher can command. To organize instruction in accounting under these conditions and in such a way as to make a genuine contribution to the liberal arts curriculum as a whole is a difficult task. Nevertheless I venture to suggest that it is a task that is by no means futile nor is it one that is impossible of successful performance.

COMMENTS BY ANDREW BARR

Professor Howard leaves very little to be added by a critic who agrees with practically everything he has said. The paper you have just heard when considered together with its author's earlier remarks[1] on the same subject presented at our convention in Washington in 1929 and the other two

[1] "Accounting Instruction in the Liberal Arts Curriculum," Accounting Review, Vol. v, No. 2, June, 1930, pp. 146–149.

papers[2] read at the same time seem to cover the subject quite adequately on nearly every aspect of the question. It would appear to be my duty under these circumstances to add what additional evidence I can to reënforce the position taken by Professor Howard today and Professors Campbell and Haüslein as well as Professor Howard six years ago.

The discussion in 1929 was limited to the small liberal arts college while this year no such restriction is imposed. This allows us to consider the large eastern universities where no college of commerce has been established and where, if accounting is taught, it is presumably a part of a liberal arts curriculum. This I assume to be the case in Harvard College, Princeton University, Brown University and Yale College in Yale University. These four examples raise the only point on which I can take issue with Professor Howard. His department at Princeton offers accounting as a one term prerequisite for a one term course in corporation finance where accounting methods are employed when appropriate.[3] Harvard offers a one term course in accounting as a substitute apparently for a second term of statistics.[4] Brown[5] and Yale[6] Universities offer two full years of accounting. In both cases the first year course must precede or accompany the course in corporation finance. Thus it appears that three of our four examples consider a knowledge of the principles of accounting a desirable part of the curriculum and a necessary prerequisite for one of the most popular economics courses. The only difference of opinion is as to whether one term is sufficient time in which to teach the essentials of accounting or whether it is better to require a full year.

Professor Campbell's figures for the small liberal arts colleges show that of 72 colleges teaching the subject in 1929, only 10 offered one term only, 25 one full year, 8 three terms, and 14 two full years. A brief summary of the history of the course at Yale University may be of interest in this connection. Contrary to common belief, accounting has been taught there for about as long as it has been taught in schools noted for their work in accounting. Corporation Economics was offered in 1905–06 and the next year was called Corporation Finance. The following year, 1907–1908, a two hour one term course in corporation accounting was started and continued the next year and thereafter to 1924 as a three hour course. In 1924–25 the second term was added, in 1926–27 the third and in 1928–29 the fourth was introduced in the Sheffield Scientific School but was not made available to Yale College as an elective until 1932–33. Thus, for twenty-nine years one prominent eastern university has considered accounting to be a fit subject to include in a liberal arts curriculum. During the past ten years the growth in registrations for the course has been steady and impressive until today, of over 300 taking the course 200 are from Yale College. Half of the 200 are students majoring in economics while the other half are, as Professor Howard suggests, taking the course because of their own realization that it would be a good idea to have at least one "practical course" in college or because their parents think it would be good for them.

But what about the attitude of the colleges of liberal arts and sciences in our very large universities where students who are professionally inclined or expect to go into business are cared for in a College of Commerce? The Universities of Illinois and Pennsylvania are offered as examples. At Illinois, students in the College of Liberal Arts and Sciences may elect the first year course in accounting given in the College of Commerce or may take a one term course in Fundamentals of Accounting, described as "a survey course for non-commerce students only," for which Junior standing is a prerequisite.[7] At the University of Pennsylvania, students taking the Arts and

[2] James A. Campbell, "Accounting in the Curriculum of the Small Liberal Arts College," *Ibid.*, pp. 142–145. John D. Haüslein, "The Position of Accounting in the Small Liberal Arts College," *Ibid.*, pp. 150–152.

[3] Princeton University, Catalogue, 1935–36.

[4] Harvard University, Catalogue, 1935–36.

[5] Brown University, Catalogue, 1934–35.

[6] Yale University, Catalogue, 1935–36.

[7] University of Illinois, Annual Register, 1934–35.

Science course, and those enrolled in the College of Liberal Arts for Women may elect accounting though the amount is not clear from the catalogue.[8]

Vassar College is an example of an institution with a strong economics department without a course in accounting. Their department of Economics and Sociology lists twelve strictly economics courses, one being "Corporations" described as covering "organization of the modern corporation; corporation finance; the stock market; industrial combinations; public utility control."[9] One would think that a knowledge of accounting might help in covering so wide a field. When a well-known shop[10] for women advertises stockings in the form of a broker's stock offering there must be an assumption on their part that women understand accounting and financial terms as well as men.

In his paper in 1929, Professor Howard outlined his course at Princeton and made the statement that he considered "it possible to teach the fundamentals about the general journal, the general ledger, special journals, subsidiary ledgers, controlling accounts, and the balance sheet and the statement of revenue and expense as related to each other and to these general special books in a period of approximately ten weeks." The accounting staff at Yale agree with him on this point but consider this only the background for the real work of the course which covers corporation accounting for stocks and bonds and a comprehensive study of the balance sheet and profit and loss statement involving the problem of the correct determination of income and finally an introduction to methods of analysis and interpretation of published financial statements. For a course of this kind a year is the minimum and more time could be used to advantage.

In carrying out such a program we are heartily in accord with Professor Howard's opinion that discussion of controversial questions adds spice for the better undergraduates even though some of the less able students would much prefer to have a definite set of rules to learn and having done so leave the course with the idea that they know all about accounting.

If we need any support for our claim that the well educated gentleman of the present day needs at least a first course in accounting as a part of his liberal training we need only to turn for our evidence to the newspapers and the financial reports of corporations of the past ten years. Outstanding examples of controversial questions in accounting practice that must confuse the layman may be cited as material that could be used as a basis for classroom discussion.

In the 1930 report of a large film company,[11] the president devotes ten pages to a discussion of accounting problems, the most important of which is a difference of opinion between two well known accounting firms in respect to valuation of inventories and depreciation of theatre equipment, a difference of opinion measured in dollars and cents of one half of the $12,000,000 surplus as reported.

Along similar lines, we find the New York Stock Exchange having difficulty in analyzing the reports of oil companies because of wide variation in accounting practices.[12] Results under the different methods in use vary so widely that a change in method may mean converting a reported loss of a few hundred thousand dollars to a gain of millions in the case of one prominent oil company[13] whose accounts are certified by one of our largest firms of accountants.

And what is the gentleman stockholder to think of accounting and accountants when in two successive years he receives certified reports of the accounts of his corporation,[14] the first year a short certificate with everything apparently in good order; while the second year another firm of auditors presents a surplus account filling one entire

[8] University of Pennsylvania, Catalogue, 1934–35.
[9] Vassar College, Catalogue, 1934–35.
[10] Peck and Peck, New York and Chicago.

[11] Fox Film Corporation, Annual Report, Fifty-two week period ended December 27, 1930.
[12] New York Times, February 8 and May 24, 1934.
[13] The Texas Corporation, Annual Reports for 1933 and 1934.
[14] Real Silk Hosiery Mills, Annual Reports for 1930 and 1931.

page in reporting adjustments which convert a healthy surplus of $4,000,000 into a deficit of $500,000?

Reports of the four year fight between the New York Stock Exchange and the Allied Chemical and Dye Corporation and the proceedings in the proposed merger of Bethelehem Steel Corporation and Youngstown Sheet and Tube Company are striking examples of the difficulty of digesting the morning's news without some knowledge of accounting principles.

College men are being urged to enter politics on the theory that we will have better government if they gain the upper hand in municipal, state and national affairs. Citizens' committees and taxpayers' associations are being organized in many of our cities to study the problems of government, mostly with the idea of getting better government services cheaper than at present. The college man entering upon any of these various activities as a public spirited citizen soon finds a knowledge of accounting a valuable asset.

We could go on almost indefinitely citing examples but it should not be necessary for us to argue the case for the inclusion of accounting in a liberal arts curriculum. The students themselves have been doing the campaigning for the past five years at least. It is our duty as teachers of accounting to make the courses we offer to these students an adequate presentation of the subject as revealed to them in modern corporation practice.

UNIFORM HOSPITAL ACCOUNTING

C. Rufus Rorem

The general advantages of uniform accounting among hospitals are the same as for business enterprises, namely, comparison of operating efficiency between hospitals and periods of time, and establishment of effective relations with the public served by the institutions.

Hospitals are a combination of commercial enterprise and social agency. As a commercial enterprise a hospital may provide services to customers, that is, patients, at prices presumably based upon the costs of the services rendered. As a social agency a hospital may serve a client or customer, regardless of his ability to pay, the costs being met by some other individual or group.

This dual aspect of hospital service pervades every problem of administrative practice or public relations. Governmental hospitals are, for the most part, conducted strictly as social agencies with the direct beneficiaries paying none of the costs. Privately owned hospitals, on the other hand, are conducted strictly as commercial enterprises, with the patients paying the full costs including the fixed charges, and with charity provided only by compulsion through the uncollectibility of accounts receivable. The incorporated non-profit hospitals combine both the commercial and social aspects. Many patients voluntarily purchase care at the scheduled rates without expectation of charity or discount. Others are accepted on a free or part-pay basis, with the assumption that costs will be met from individual contributions, endowment fund earnings, community chest funds, or governmental taxation.

The American Hospital Association includes in its membership 2,500 of the largest and the most important hospitals in the United States, representing a capital investment of several billion dollars.

The past five years have emphasized the need for considering hospital care as a coöperative service rather than a competitive business. In a few communities, notably New York, Cleveland and the Carolinas, hospital activities had been coördinated through city or state-wide financing programs. In each instance a uniform classification of accounts had been developed for the

regulation of specific institutions. When the Advisory Committee on Accounting of the American Hospital Association was created in 1933, each member, except the Chairman, was prepared to submit an ideal classification of accounts. The function of the Chairman proved to be one of reconciling differences among the Committee members.

Exhibits A to F inclusive are prepared in necessary or appropriate. Metropolitan institutions with investments of several million dollars have been conducted for decades with no accounting of the cost or value of land, buildings or equipment. This oversight has arisen in part from the fact that less than ten per cent of capital investment is provided on a commercial basis, that is, with expectation of interest on or repayment

BALANCE-SHEET—LOCAL GENERAL HOSPITAL

December 31, 19—

Assets			*Liabilities, reserves, capital*	
		Current funds		
Cash		$ 2,000	Accounts payable	$ 2,700
Accounts receivable—patients	$ 15,000		Notes payable	400
Notes receivable—patients	1,200		Accrued salaries and wages	410
Other accounts and notes receivable	2,040		Other current liabilities	260
	$ 18,240		Total	$ 3,770
Less—reserve for bad debts	4,800	13,440		
Supplies and materials (inventories)		6,200	Working capital	18,720
Prepaid expenses		850		
Total		$ 22,490	Total	$ 22,490
		Investment funds (endowments)		
Bonds, stocks and other securities		$ 41,000	Investment fund capital	$ 43,600
Real estate		2,600		
Total		$ 43,600	Total	$ 43,600
		Plant funds		
Land		$ 15,000	Bonds and mortgages payable	$150,000
Buildings	$450,760		Other plant liabilities	16,000
Less—reserve for depreciation	29,240	421,520	Plant capital	304,390
		$436,520		
Fixtures and equipment	$ 62,380			
Less—reserve for depreciation	28,510	33,870		
Total		$470,390	Total	$470,390

Exhibit A

accord with the classification of accounts adopted and recommended by the American Hospital Association. The published report is available from the offices of the American Hospital Association. It includes four specific contributions to the field of hospital accounting, each necessitated by and arising from the dual role of the hospital as a commercial enterprise and a social agency.

The first distinctive feature of the report is the recommendation that hospitals prepare balance sheets regularly. Although the average general hospital represents a capital investment of nearly one-half million dollars, balance sheets have not been considered of the original capital. Non-profit institutions have refused to recognize interest or depreciation on capital investment as costs of hospital care to the community.

In the balance sheet which is prepared as Exhibit A, three separate types of funds are recognized. The first represents the current funds used in hospital daily activities for which most institutions have always maintained adequate accounting records. The second includes the investment funds owned by the institution, the income of which is used for purposes of financing current hospital activities. The third grouping is the plant funds—land, buildings, and equip-

ment. Usually plant funds have been provided and replaced by contributions or taxation, not from current hospital revenue.

SUMMARY STATEMENT OF INCOME AND EXPENSE LOCAL GENERAL HOSPITAL

Year Ended December 31, 19—

Net Income from Patients (Exhibit C)			$109,810
Operating Expenses			
Administration		$11,400	
Dietary			
Household and Property			
Housekeeping	$ 8,400		
Laundry	7,500		
Heat, Light, Power, Water	11,100		
Maintenance and Repair	4,350		
Motor Service	2,800		
Depreciation of Equipment (Replacement Allowance)	6,140	40,290	
Professional Services			
Medical and Surgical Service	$14,000		
Nursing Service	15,220		
Medical Records and Library	2,100		
Social Service	2,200		
X-Ray Service	2,400		
Laboratories	1,800		
Other Special Services	2,000	39,720	
Total			$116,610
Excess of Operating Expenses over Net Income from Patients			$ 6,800
Non-Operating Income			
Net Income from Non-Hospital Service		$ 650	
Individual Contributions	$ 1,400		
Community Chest	3,650	5,050	
Interest and Dividends		2,245	
Income from County Government		2,730	
Total		$10,675	
Non-Operating Expenses			
Interest on Short Term Loans	$ 280		
Interest on Long Term Loans	3,130	$ 3,410	
Excess of Non-Operating Income over Non-Operating Expense			$ 7,265
NET GAIN FOR YEAR			$ 465

EXHIBIT B

The preparation of hospital balance sheets should serve to clarify the economic aspects of hospital care. It will create an increased sense of accountability for public funds provided for the care of the sick and emphasize the fact that hospital facilities should be adequately utilized in the provision of health services.

The second new feature appears in the classification of income. The Committee recommends a sharp division in the accounting records between income from patients and income from the general community. Income from patients includes all income from direct financial sponsors of patients,

NET INCOME FROM PATIENTS LOCAL GENERAL HOSPITAL

For Year Ended December 31, 19—

Gross Earnings from Hospital Service		
Day Rate Service		$ 83,000
Special Professional Services		
Operating Room	$15,200	
Delivery Room	3,600	
X-Ray Service	11,400	
Laboratories	3,900	
Physiotherapy	1,840	
Other Special Services	3,120	39,060
General OPD Services		2,500
Total		$124,560
Deductions from Gross Earnings		
Courtesy Allowances	$ 2,330	
Charity Allowances	5,590	
Transfers to Income from County (Exhibit B)	2,730	
Allowances for Bad Debts	4,100	14,750
Net Income from Patients (Exhibit B)		$109,810

EXHIBIT C

such as family members, insurance companies, or others legally liable for services to individuals. Every hospital, except those operated as private enterprises, receives some income from the general community for the care of patients who cannot meet the costs of the hospital services they require. This income may be received through interest or earnings from invested funds, commonly referred to as endowment. It may take the form of regular or sporadic contributions from individuals, donations or legacies, funds of community chests or federations. Finally, a hospital may rely in whole or in part upon governmental support, namely, use of tax funds collected by federal, state, city or county governments. The ratio varies widely in which these different sources of income accrue to a specific institution.

Tax funds should not be classified as "income from patients" even though payments are received on behalf of specific individuals requiring public charity.

Income from patients is classified as "operating income"; all other sources of revenue are classified as "non-operating income." Every service of the hospital is credited to departmental "gross earnings" accounts, and according to an accepted fee schedule with separate accounts for each type of revenue-producing service, such as day-rate service, x-ray, laboratory, etc. From these total gross earnings are subtracted certain "deductions," in the form of allowances or transfers, to give the Net Income from Patients, as shown in Exhibit C.

The third characteristic feature of the report of the Committee is the recognition of fixed charges in hospital service, particularly interest and depreciation. In the past some hospitals have omitted all mention of depreciation on capital investment; likewise many institutions have been fortunate to operate without the requirement of interest payments. Comparability of hospital operating costs requires uniform treatment of these two important factors of cost. In order to call the attention of hospitals to these items of expense, it was necessary to recommend separate and special categories of expenditure. The Committee recommended unanimously that interest and depreciation, as well as taxes and rent, be placed in a separate category to be designated as "non-operating expense." This provision makes it possible for hospitals to compare costs in different institutions and for different periods of time. The basis of comparison may be merely the operating expenses, or the total expenses, including the fixed charges. In those cases where hospitals do not include allowances for depreciation the comparisons of operating costs will be legitimate; in those cases where hospitals include allowances for depreciation an examination of the records will reveal whether the allowances are reasonable estimates.

The depreciation classified as non-operating expense includes only allowances for depreciation in value of buildings and permanent equipment. Allowances for depreciation or replacement of scientific apparatus and equipment are included as operating expense. This segregation of depreciation expense is dictated by custom rather than by logic. Obviously depreciation of building or permanent equipment is as much "oper-

ANALYSIS OF OPERATING EXPENSES OF .... HOSPITAL FOR ....
PERIOD ACCORDING TO TYPE OF PROFESSIONAL SERVICE

			Special Professional Services					
Account Number and Title	*Total*	*In-Patient Day Rate Service*	*Operating and Del. Room*	*X-Ray*	*Labor*	*Others*	*Total*	*General OPD Service*
General Admin.	$11,400	$ 8,930	$1,100	$ 230	$ 480	$ 340	$2,150	$ 320
Dietary	25,200	21,400	2,200	490	240	480	3,410	390
Housekeeping	8,400	6,140	1,100	360	330	170	1,960	300
Laundry and Linen	7,500	4,800	1,950	230	65	200	2,445	255
Ht., Lt., Power, Water	11,100	8,500	1,200	400	400	200	2,200	400
Maintenance and Repair	4,350	2,900	650	280	180	190	1,300	150
Motor Service	2,800	2,500	—	—	—	—	—	—
Depreciation of Equip.	6,140	3,000	1,200	1,100	200	440	2,940	200
Medical and Surgical Serv.	14,000	8,880	2,020	1,280	540	550	4,340	780
Nursing Service	15,220	10,700	2,460	550	300	510	3,820	700
Medical Records and Library	2,100	1,600	200	100	—	—	300	200
Social Service	2,200	1,600	—	—	—	—	—	600
X-Ray	2,400	—	—	2,400	—	—	2,400	—
Laboratories	1,800	—	—	—	1,800	—	1,800	—
Other Sepcial Service	2,000	—	—	—	—	2,000	2,000	—
Total Operating Expenses	$116,610	$80,950	$14,080	$7,420	$4,535	$5,080	$31,065	$4,295

EXHIBIT D

ating expense" as the depreciation of temporary or short-life equipment. Hospital tradition, however, has included the allowances for replacement of short-life equipment "operating expenses," and has accounted for replacements of buildings and permanent equipment as if they were "no expense at all." The first step therefore to uniform and systematic treatment of depreciation was this subdivision of the item.

The fourth and final point of emphasis in the Committee's report was recognition of the fact that hospital service is a group of joint-products. Each patient does not receive every hospital service, nor does each hospital service resemble the others.

There are three main types of revenue-producing hospital service. First, the day-

COMPARISON OF GROSS EARNINGS AND OPERATING EXPENSES FOR REVENUE-PRODUCING SERVICES LOCAL GENERAL HOSPITAL

For Year Ended December 31, 19—

Type of Hospital Service	*Gross Earnings*	*Operating Expenses**	*Gain or Loss*
Day-Rate Service...	$ 83,000	$ 80,950	$2,050
Operating and Delivery Room.....	18,800	14,080	4,720
X-Ray............	11,400	7,420	3,980
Laboratories.......	3,900	4,535	635
Other Special Services.............	4,960	5,030	70
General OPD Service	2,500	4,595	2,095
Total.........	$124,560	$116,610	$7,950

* The apportionment of operating expenses among the revenue-producing services is accomplished according to a formula and work-sheet in exhibit D.

Note: The gain or loss shown in the right hand column does not represent the net gain or loss to the institution. Many of the revenue-producing services are provided to patients at less than scheduled rates, and many patients make no payments on their own behalf. This table is presented to show the gross contribution which each type of service makes to the hospital's income, and the portion of the total expenses incurred for each service. From the operating expenses of each hospital service it is possible to calculate average unit-costs for each department of hospital activity.

Exhibit E

rate service to in-patients, which is charged for by the day and includes room, board, general nursing, and certain types of routine professional care. Second, the general out-patient service, which includes the services of physicians who consult with and treat ambulatory cases in much the same manner as private patients in their offices. These services are paid for (if at all) on the basis of a visit to the medical practitioner. Third, the special professional services of diagnosis or treatment for in-patients, served by the

COST-PER-PATIENT DAY

Type of In-Patient Service	*Operating Expenses*	*Number of In-Patient Days*	*Cost per Patient Day*
Day-Rate Service....	$ 80,950	26,508	$3.05
Special Diagnosis and Treatment Service to In-Patients.....	22,805	—	—
Total..........	$103,755	26,508	$3.91

Note: The Cost-per-Patient Day includes no costs for general or special services rendered to out-patients. The figures shown above include only "operating expenses."

Exhibit F

day, and out-patients, served by the visit. Illustrations of the professional services are x-ray, laboratory, physiotherapy, or the use of the operating room or delivery room.

The policy of charging for these three classes of hospital service may vary for individual patients. For example, a patient may pay the regular fee schedule for day-rate service, and receive other special professional services at a discount or free of any cost to himself. Likewise some patients may be referred to the hospital solely for the purposes of x-ray diagnosis or treatment.

The recognition of the various joint-products in hospital care suggested to the Committee the advisability of cost analysis which would estimate the costs of the various types of hospital services, either as a whole or as units. The Committee recommends strongly that hospitals make periodic cost analysis for the various types of service. A work sheet for allocation of the expenses to revenue-producing services is shown as Exhibit D. Estimated costs of the various revenue producing departments may serve the hospital administrator as it does the business man, namely for a) comparing and improving administrative efficiency, b) testing the adequacy of an existing fee schedule, c) presenting a statement of services rendered to the general public.

The Committee placed only minor emphasis upon the calculation of unit costs in the various revenue-producing departments, except for the much discussed unit of day-rate service, "cost per patient day." The Committee emphasized the necessity of excluding, for purposes of comparison, all costs which were not provided on the "patient-day" basis, namely the general out-patient service and the special professional services. The Committee also submitted a uniform definition of "patient" and of "day."

The report of the Committee was prepared for the use of the administrator, although it includes a detailed classification of accounts with instructions to the bookkeeper as to items to be represented under each heading. It contains no sample bookkeeping forms but does include typical, uniform financial reports.

Accounting instruction has, in the past, selected illustrative material almost exclusively from the fields of private business. Undoubtedly this concentration has arisen in part from the scarcity of authoritative material for non-profit institutions and agencies. It is to be hoped that improved accounting for hospitals, as typical of non-profit institutions, will provide the basis for more serious attention in accounting instruction to this growing and permanent phase of American life.

COMMENTS BY MONROE S. CARROLL

Dr. Rorem's book, *The Public's Investment in Hospitals*, is one of the distinctive research contributions of the last decade. It is a testimony to what may be produced in the accounting and social finance field of research when time, money, and intelligence are combined in a single endeavor. This book should be of worth not only to those who are especially interested in hospital accounting but also to students interested in research in accounting theory and cost accounting.

Library study and some field investigation work in hospital administration and accounting has caused me to conclude that hospital management offers the superlative test of incongruity. Under the same roof of more than half of the 7000 American hospitals, is the professional side of the institution on one hand making every effort to command and to apply the latest developments and achievements of science in an effort to prevent and relieve human suffering, but on the other hand the same administrative officials have all but spurned any attempt to make application of the techniques and discoveries of business administration in an attempt to solve financial ailments of hospitals.

Hospital accounting in many institutions has not advanced beyond the stage of a mere attempt to account for the financial integrity of current receipts and disbursements. Management has apparently never thought of accounting as a tool for providing information which might be used in planning and directing the policies of such organizations.

There are a few institutions even as backward in business methods as the situation Mr. Bacon, superintendent of the Presbyterian Hospital of Chicago, described as existing when he began as a hospital superintendent more than thirty years ago. He said at that time that a number of the hospital attendants made more money on commissions from the sale of the hospital supplies to patients than they were paid in salary.

Why should hospital accounting in hundreds of million dollar institutions be so backward as not to recognize the advantage of the accrual method of accounting over the cash receipts and disbursements method; why should fixed assets be so disregarded that no record or report is attempted for any asset other than inventories, supplies, cash, receivables, and endowment funds?

Shouldn't any three billion dollar investment whether it be private or public, profit seeking or not profit seeking, command sufficient interest and attention to be intelligently utilized and safe-guarded?

A few years ago in Philadelipha some misguided, but no doubt well meaning, promoter was about to launch a subscription campaign

for a new hospital when an intelligent citizen raised the question as to the real need for additional hospital facilities. A survey conducted by the community chest director revealed a woefully unused condition in hospital facilities.

What is responsible for the lack of progress in hospital accounting? Have university instructors failed in their opportunity to influence this phase of accounting? I can well imagine that 95% of the accounting instructors in American colleges and universities never find occasion to mention the term hospital accounting to their students.

Yet it should be said in justice and credit that at least four names appearing on the 1936 National Accounting program have made some effort to influence an improvement in hospital accounting. Professor Cole devotes a good part of *Institutional Accounting* to the subject of hospitals records. Paton's *Accountants' Handbook* describes clearly and effectively the model accounting system used by the University of Michigan Hospital. Mr. J. O. McKinsey has influenced the business management of at least two Chicago hospitals. He is a director and business consultant to the Woodlawn Hospital located only a few blocks south of the University of Chicago. Only a short time ago he submitted a formidable report for the reorganization of the new medical school and hospital of the University of Chicago.

Dr. Rorem's excellent presentation on uniform hospital accounting and the proposal of the Advisory Committee on Accounting of the American Hospital Association presents suggestions for uniformity of accounting classifications and reports which is greatly needed.

In standardized accounting and reporting necessarily there lurks the danger of preventing progress by a failure of adaptability, but the average situation is so greatly improved and information made comparable under standardization so valuable that a well designed standard system should be accepted with hearty acclaim.

The Committee's first recommendation of a classified balance sheet for hospital use is a much needed report. But few hospitals, in the past, have attempted to prepare complete balance sheets. Attention to the preparation of balance sheet items will make for greater accuracy and care in preparing the income and expense statement. Eventually standard ratio comparisons similar to those used by commercial and industrial concerns should be worked out for hospitals.

The classification of the balance sheet items into current funds, investment funds and plant investments is in accord with good commercial accounting practice. Naturally not all accountants will accept enthusiastically the exact order of the suggested arrangement. Professor William Morse Cole in *Cost Accounting for Institutions* reverses the arrangement suggested by the Advisory Committee on Accounting for American Hospital Associations and places fixed assets first in the balance sheet. At the same time W. R. Thompson in *Accounting Systems* follows the same balance sheet order as suggested by the Advisory Hospital Committee.

The operating statement for hospitals has heretofore received relatively more attention than the balance sheet, yet this statement has never approached perfection. In most cases it has lacked in completeness, logic, and uniformity.

The Committee's two fold classification of income into operating income or income from patients, and non-operating income or income from general community should make for a rather easily executed plan of classification. However, where income is received in specific payment for service rendered I should favor classifying it as operating income, despite the fact that it might come from taxes. The situation might arise that in some cities and counties patients are placed in hospitals with their care paid for just as similar expenses are paid by individual patients.

The question of fixed charges for non-profit seeking organizations has had little attention. Arnett in his book, *College and University Finance*, states a typical position on the question when he says, "As colleges are not being operated for profits, the same considerations for providing for replacement of buildings and equipment from income do

not apply to them . . . unless the trustees adopt as their policy the plan of providing from annual income a sum equal to the amount of estimated depreciation and set it aside regularly and invest it so as to provide an adequate amount when needed, the entries are of no real value and may complicate the accounts."

If the argument is sound that depreciation should be totally unrecognized on donated fixed assets, wouldn't there be some logic in saying that there is not any need in accounting for any form of donated resource? Certainly if hospitals are to secure adequate and complete information they must account for all fixed charges such as depreciation, taxes, and interest. I regret that the committee deems it judicious to compromise logic for misguided custom in classifying depreciation on the building as a non-operating expense instead of an operating one.

There is real need for a distinction and allocation of the income and expenses for the different services of in-patient and out-patients as well as for a distinction between the cost of caring for patients, training nurses and providing facilities for the training of medical students. If hospitals are ever able to make financial decisions based on information instead of hunches and hobbies of management they must have unit cost for such decisions.

Dr. Rorem's committee is to be commended on its attempt to define the term "patient day" since this is one of the commonly accepted units of measurement used in comparing hospital cost.

Society should receive untold benefits in terms of operating efficiency of hospitals if the suggested uniform system were adopted. Custom and indifference may defeat any wide spread adaptation and application of the system unless unusual encouragement is given by instructors in accounting, hospital executives, practising accountants, accrediting hospital associations, and benefactor foundations.

ACCOUNTING FOR "INCOME" MUNICIPALITIES

IRA N. FRISBEE

THE GROWING interest in the subject of government accounting is evidenced by the increasing number of article and papers upon this subject. This may be due in part to the tremendous increase in the volume of governmental transactions. When we realize that over nine million persons were on the payrolls of the Federal government at December 1st, 1935, and that state and local governments have added tremendously to their relief and other payrolls during the last three years, it is evident that the increased interest in accounting for the affairs of government is a paramount necessity. It is currently reported that one-third of all the families in the United States share either in direct Federal payments, or in loan and loan insurance transactions of Federal credit agencies. Under these conditions, we must recognize that our Federal government has become one of the largest "business" organizations in the world. Furthermore, the current tendency appears to be one of shifting the burden of collecting and disbursing funds from the Federal government to state and local governments, which will not decrease the accounting problems, but in many instances will increase them because of the greater number of governmental units affected.

It is now generally recognized that the principles of accounting for our greatest business, the business of government, cannot follow exactly the patterns of accounting for private business enterprises. As yet, the principles of governmental accounting, with standard classifications and terminology, have not been completely developed. Tremendous strides in that direction have been taken through the work of the National

Committee on Municipal Accounting, which was organized in January, 1934. This committee by its work, has stimulated the interest of accountants in the problems of municipal accounting, and it has produced definite recommendations, which, I believe, are being accepted as fundamental and sound in principle. The purpose of this paper is not to review the work done by the National Committee, but rather to present problems which as yet may not have been answered in the recommendations of the Committee. Specifically, this discussion will consider problems which may arise in presenting operating statements of municipalities, and in maintaining the accounts to obtain the operating statements, particularly as to items of "income," "revenue," or "receipts."

The National Committee has outlined a classification for the grouping of assets, liabilities, surplus, and operating accounts of a municipality. The accounts of each group are known as the accounts of a respective "fund," and the assets of each fund are those which have been obtained for the particular purpose, or purposes, for which the fund exists. Similarly, the liabilities are grouped in each section of the balance sheet, or the accounts, according to the purpose for which the liability is incurred. The operating accounts are to be segregated according to fund groups, and the operating statements, showing all transactions, are to be prepared to show separately the operations of each fund. The principal "fund" divisions into which the accounts should be segregated are the general fund, special revenue funds, bond funds, special assessment funds, sinking funds, trust and agency funds, and utility funds, with an additional section sometimes used, known as the working capital fund. A description of the assets and liabilities to be included under each of these groups, and of the purposes of each of the funds, need not be reviewed in this discussion.

The recommendations of the Committee indicate that the operating statement prepared for each fund should present a complete picture of the transactions of the fund. Can this be obtained by a statement showing the income to and expenditures from each respective fund, or is another form of statement necessary? Should the operating statements of all funds be alike in form, content and title?

In accounting for private enterprises it is ordinarily considered that income should not include the capital invested, the resources, obtained by donations, or those obtained by borrowing. Briefly, it may be said that income in ordinary business enterprises represent items, which, if obtained by a corporation, would properly go to earned surplus, but income should not include items to be credited to capital, donated or paid-in surplus, or liability accounts.

This general conception of income is not accepted in the field of government accounting, except in departments operated to furnish services or commodities, for which the consumers pay by definite charges or rates for the amount of services or commodities received. These departments are found in public-utility operations, and more recently, in the case of the Federal government, in banking and other enterprises which are in competition with private business activities. Since the income problems in accounting for competitive activities of the government should not differ materially from those in private enterprises, we may here omit their consideration.

For the accounts of the ordinary municipal transactions, the term, "income," has not received an exact and authoritative definition. One of the authorities on municipal accounting, Mr. A. E. Buck,[1] includes in his income classification three general types of items, namely, revenues, borrowings, and sales of properties. By this classification, it would seem that all sources of assets are to be shown as items of income. Revenues, in governmental accounting, appear to include all sources of increases in assets other than borrowings. If borrowings are also considered to be items of income, it follows that all increases in assets are to be credited to income. Furthermore, if sales of properties produce income in the

[1] *Municipal Finance*, A. E. Buck, p. 72. The Macmillan Company, N. Y. 1926.

total amount received for the property, it follows that income may result by exchanging, without profit, one asset for another.

Such a concept of income appears to have no basis from the standpoint of accounting principles for private enterprises; yet, in accounting for the assets obtained by a governmental unit, there is much to be said for the classification. The function of a government in its general activities, and in many of its special activities, is to obtain resources with which to provide services and assets for the benefit of the public. To this end, the administrative officers determine and set up a budget of amounts to be expended for the public benefit in a given period, and at the same time they estimate or budget the resources to be obtained to meet these expenditures. A major portion of these resources will be obtained from revenues, but in some cases, and for some purposes, it may be necessary to obtain them by borrowing. Also, when properties can be sold which have been acquired by the municipality in a previous period, but which are no longer needed for public use, it would appear that such sales provide resources which then become available for current expenditures. Thus, if land purchased for a city hall site is not used for that purpose, due to a change in plans, or if property formerly used as a park is no longer desired for that purpose, it may be sold to produce current assets available for general or specific expenditures of the current period.

An examination of the operating statements published by a number of cities indicates that borrowings are not usually shown as income to the city, but that nonrevenue income such as the proceeds from sales of properties is usually included. In the preparation of operating statements, this practice appears to have a more logical basis than that of including all sources of assets as income available for expenditures. For example, in presenting a general fund operating statement, it would appear preferable to show that the revenue income and the special nonrevenue income from sales of properties were inadequate to meet the expenditures of the period, leaving a balance of expenditures to be met by borrowed funds, rather than to show that the income (including borrowings) equaled the expenditures. An exception may arise in accounting for the transactions in a bond fund of the city, where the operating statement will show chiefly the cash received from the sale of bonds, together with the expenditures of that cash in acquiring the assets authorized. The source of the cash obtained is borrowing, as evidenced by the bonds issued. Should an operating statement for a bond fund show these transactions as income and expenditures of the fund, or, in this instance, is the operating statement merely a statement of cash receipts and expenditures?

Perhaps there is a difference between a bond liability authorized by vote of the citizens of a municipality and the borrowings for current purposes authorized by the administrative body of the municipality. In a sense, bonds voted by the electorate may be said to represent tax-revenues authorized by that electorate for future periods. In voting bonds, the taxpayers assess themselves and their successors-in-interest. It may be argued that this self-assessment produces income because it is not widely different from the main item of city revenue, namely, the taxes assessed for the current period by the administrative body. Borrowings authorized by the administrative officials, however, are not revenues from taxes assessed by these officials, or self-assessed by the taxpayers, but are precedent to, and in anticipation of, tax revenues to be obtained by later assessments, or from delinquent assessments already levied. Thus, in defining income, an argument might be presented for including the one type of borrowing, but not the other.

Even revenue items in a municipality differ so materially from the usual revenue or income of private enterprises, that doubt may arise as to whether revenues can be classified as income. A major portion of the revenues of a city, other than from public-utility and similar operations, consist of taxes levied, fines imposed, and fees for licenses, permits, and other privileges. These items are not earnings, yet they are

known as revenues. Other items of revenue include donations and gifts, which are neither earnings nor levies imposed by authority of the governing body, but are voluntary contributions. Grants and subventions from other governmental bodies, such as the state or county, are classed as revenues of a municipality although these also are gifts. All such revenue items do not have the characteristics which we apply to the term "income" when we think of profit-making enterprises.

At this point, one begins to wonder not only what to include in the operating statement of a municipality, but what title is to be given to each operating statement. Obviously, we would not call it a profit and loss statement. If it is to be called "an operating statement" of the general fund, or of any other fund, how shall we classify the items shown in the statement? Shall we say, "the income of the fund is as follows," or "the receipts of the fund are as below," or "the revenue and non-revenue items may be shown as follows"? Furthermore, is the operating statement to include accrued items or only cash items (whether these items are called income, revenues, or non-revenue items)?

The confusion becomes greater, rather than less, when the operating statements of various cities are examined. In these statements, we find such titles as "Revenue and Expense Statement," "Sources of Income and Funds To Which Apportioned," "Schedule of Receipts, Disbursements, Transfers, and Fund Balances," "Statement of Budget Income and Expenditures," "Cash Receipts and Disbursements." The United States Department of Commerce has prepared annual reports giving financial statistics of cities having a population of over 100,000. In these reports, the tables showing the operating statistics are entitled "Revenue Receipts" and "Governmental-Cost Payments for the Operation and Maintenance of General Departments." In this connection, it is interesting to note that revenue receipts in these Federal reports are stated to represent "amounts of money or other wealth received by or placed to the credit of local governments for governmental purposes, under such conditions that they increase the assets without increasing the debt liabilities, or decrease the debt liabilities without decreasing the assets."[2] It is apparent that non-revenue items are excluded, and, therefore, the statistics are prepared to compare only revenues with the operating and maintenance costs. Yet, apparently, accrued revenue can be included in revenue receipts, as the definition includes amounts of money *or other wealth* placed to the credit of governments. The extent to which accrued revenue is to be included is not indicated, however, for this depends upon the degree to which wealth is placed to the credit of the municipality in a certain period of time, before realized in cash.

The extent to which revenues should be accrued has been indicated by the National Committee on Municipal Accounting in a general statement made by Professor Lloyd Morey of that Committee, in which he states that "the Committee believes that revenues should be accounted for on such a basis that only those sums should be considered revenues which are certain of realization of cash within a reasonable time."[3] Although this may result in placing some items on an accrual basis and other items on a cash basis, this recommendation appears to be sound, particularly from the administrative side of government. If municipalities will also adopt the policy of spending only what is certain to be available for spending, deficits will be avoided.

In face of conflicting practices and incomplete recommendations for the accounting of the operating transactions of municipalities, we must be hesitant in arriving at definite conclusions as to how these transactions are to be presented in the annual statements, and as to the title to be given to the statement. It is my opinion, that what is needed is something in the nature of an application of funds statement, sometimes called a "statement of resources obtained and their

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[2] *Financial Statistics of Cities Having a Population of Over 100,000—1932;* U. S. Dept. of Commerce, Bureau of the Census, 1934.

[3] *The Accountants Digest,* September 1935, p. 18.

application." By use of this form of statement, all transactions of each fund could be completely set forth, regardless of whether income was realized or not. For example, in summarizing the general fund transactions in an operating statement, the statement could be called, "General Funds Obtained and Their Application." In showing the sources, a grouping of items would be advisable to show the revenues obtained on an accrual basis separated from revenues handled on a cash basis. Even the word, "revenue," could be excluded, if desired, by referring to the items, such as taxes, fines, donations, etc., as "sources of funds." Receipts obtained by the sale of property would need to be separately set forth, as well as the proceeds of loans obtained by borrowing, but they would not require to be classed as "income." The effect of the transactions upon the surplus of the funds would need to be summarized in a recapitulation of the totals of the particular groups which affect the fund surplus.

Similarly, in summarizing the transactions in other funds, the sources of these funds, such as bond funds, sinking funds, special assessment funds, and special revenue funds, would be presented, and the expenditures, the amounts reserved, and the unexpended balances would be shown. For example, a statement of "Bond Funds Obtained and Their Application" would present the operations of the bond funds by showing "funds obtained from the sale of bonds," and those obtained from other sources, if any, together with a summary of the expenditures and the balances unexpended.

Accounting should serve the purposes of the administrative officers of the municipality. It should also tell the citizens how the funds have been administered. What they need to know is what funds have been raised, and what has been done with them. It appears to the writer that a statement of income and expenditures will not obtain this result, unless we accept a broad definition of income in which all sources of funds obtained will be included. If such a broad definition is accepted and the term "income" is used in statements of municipalities, the result will be very confusing to the public and the city officials, and to the accountants as well. By avoiding the term, "income," and by shifting the emphasis to "sources of funds obtained and their application," a clearer statement of the transactions of the city can be obtained.

An objection to the use of the application of funds statement, in summarizing the transactions of each of the funds of a city, may be that this type of statement has not been universally used in private-business accounting. Even the form of the application of funds statement, and the best title for the statement, has not been standardized for business reports. Yet, it is possible that this type of statement can be developed in municipal accounting in a standard form, more easily than in commercial enterprises. The purpose of the application of funds statement coincides with the governmental function of obtaining and expending funds. The operations of a municipality, as to each of its "funds," consist of obtaining and spending funds for the purposes designated, and therefore an operating statement setting forth the transactions of a certain fund can best be in the form which shows the sources of the assets obtained and expended.

The suggestion to avoid the use of the term, "income," in governmental accounting, because an adequate definition has not been found, may be open to criticism. It may be held that a term so widely used in business transactions should be adapted to governmental transactions, even though precise rules for its use may not easily be obtained. Probably, many accountants in preparing income statements for private enterprises, have found the advice given in Professor Paton's edition of the *Accountants' Handbook* to be of particular comfort. This advice is that, "the accountant, facing the problem of defining and measuring business income under a great variety of conditions, will do well not to attempt to formulate a precise formula or working rule to be applied to all cases. Instead it is his task to work out a more or less elastic set of conceptions, rules, and procedures designed to permit the determination, accurately and

properly in view of the purposes in hand, of periodic business income." Yet, it is that elasticity in defining income which has often prevented, probably rightfully and necessarily, the standardization of income statements for business enterprises. The need for standardization in accounting statements for municipalities is even greater than in private enterprises, because every citizen should have a direct interest in obtaining complete and comparable statistics. If the term "income" can be avoided in the operating statements of municipalities, an obstacle to standardization of these statements will thereby be removed.

COMMENTS BY D. M. SHONTING

Everyone has a general idea of what constitutes "income" but no one up to the present time has satisfactorily defined it. Is it necessary for us in preparing statements of operating results to use the word "income"? The last sentence of the quotation from the accountant's handbook in Professor Frisbee's paper answers the problem of accounting for the income of municipalities namely "it is his (the accountant's) task to work out a more or less elastic set of conceptions, rules, and procedures designed to permit the determination, accurately and properly *in view of the purposes in hand*, of periodic business income."

It is generally recognized as Professor Frisbee states, that the principles of accounting for government cannot follow exactly the patterns of accounting for private business enterprises. After hearing the papers presented in the morning session of our meeting it is very doubtful, in my opinion, if the principles outlined in these papers are applicable in a practical way to primary governmental functions. If we limit our discussion to those governmental activities which are carried on by the "general" and "special revenue and expenditure" funds the purposes and aims are not in any way related to private business. The primary function of government is the preservation of life, liberty and property. To perform this function certain expenditures are necessary which must be met from levies of taxes, assessments, etc. Can it be said that governmental revenues are the results of efforts expended?

It is the function of the government to provide services and assets for the public and then provide the resources too for carrying on its activity. While it is true in accounting for revenues and expenses of a business enterprise we must take into account all accruals of income and expense in order that the cost of producing a given volume of revenue may be measured; it is very doubtful whether there is a definite relation between the volume of revenue and the costs of operating general governmental activities.

It is because of these facts that accounting for income in government differs greatly from the accepted accounting principles as they apply to private enterprises. Many members of the accounting profession fail to recognize the problems peculiar to governmental financial administration and therefore cannot reconcile or understand the concept of income as presented in this paper.

In approaching the method of reporting revenue and nonrevenue receipts in government we should not lose sight of the importance of actual cash received in governmental accounting. This item may be of minor significance in the private business enterprise but it is of major importance to the governmental administrator in carrying on his duties. All sources of receipts which increase expendible fund balances should be shown. To include accruals of revenues tends to destroy the value of the report. This idea of reporting revenues on the basis of actual cash collected has been applied to accounting for private business. Professor Paton's edition of the *Accountants' Handbook* states, "The principal conditions in practice leading to the use of cash receipts as the occasion for revenue recognition are:

1. Collection on the installment plan, over a considerable period, with or without passing of title.
2. Output in the form of a series of serv-

ices rather than in the form of definite goods or commodities."[1]

Furthermore, many states have enacted laws requiring that all revenues and nonrevenue items be reported on the cash basis. For example The "Kansas Cash Basis Law limits the expenditures to cash actually received even though the amount collected be less than the amount budgeted for expenditure, and further limits spending by prohibiting the contracting of indebtedness—the placing of an order for materials or services—unless the cash is in the treasury and available for that purpose."[2] If the accountant thoughtfully considers the problems of income as they relate to governmental activities, as well as questions of personnel and labor turnover, he will find ample justification, theoretical and practical, to support the presentation of governmental revenue and nonrevenue receipts on a "cash basis." No serious objection can be raised to the inclusion of the nonrevenue receipts referred to in Professor Frisbee's paper if these items are properly labeled. The statement title might be "Statement of Revenue and Nonrevenue Receipts and Expenditures." An operating statement prepared in this manner will present a complete picture of the transactions of the fund.

This discussion of the preparation of operating statements for the general and special expenditure funds does not mean that the form of operating statements for all funds will be alike in form, content or title. To follow strictly a uniform procedure would be not only misleading but also unsound from an accounting standpoint. Accounting for governmental funds created for the purpose of permitting the government to participate in competitive activities should follow the same principles and procedure applicable to private enterprises. Bond funds, special assessment, trust and agency funds all call for special treatment, since their nature, purpose, and function is entirely different from the operating funds.

[1] *Accountants' Handbook*, W. A. Paton, Editor, Ronald Press.

[2] *The Kansas Cash Basis Law*, L. M. Barnard, Municipal Finance, May, 1935.

In treating the transactions of "bond funds" referred to in this paper, it is my personal opinion that Professor Frisbee refers to a special expenditure fund, the moneys for the carrying on of the activities to be raised by a bond issue instead of taxation. The operating statement in this case should show the cash received from the sale of these bonds, but it should be properly labeled as being entirely nonrevenue. In connection with this type of transaction it is important that the accountant set up a contingent asset on the balance sheet "Amount to be Raised by Taxation" equal to the "Bonds Payable" shown as a liability.

Personally I can see no reason for treating bond liabilities authorized by vote of the citizens of a municipality different from borrowings for current purposes authorized by the administrative body of the municipality. Any type of long term borrowing represents an amount to be raised by future taxation. Regardless of the method by which the bond issue was created, the accounting procedure should be so designed as to report all the financial transactions relating to the bond issue as well as the status of the fund as at any given date.

Professor Frisbee suggests as a solution to the problem of presenting results of operation for municipalities an application of funds statement. He states "all transactions of each fund could be completely set forth, regardless of whether income was realized or not"; he furthermore suggests that accrued revenues be grouped separately from cash revenues. If he will exclude the accruals from his statement we can prepare a statement of Revenue and Nonrevenue Receipts and Expenditures, which will furnish all the desired information. Accruals of revenue may be properly controlled and shown in the balance sheet but not reported as actual revenues until received. How many of our governmental administrators understand accounting for accruals of income? Even double entry bookkeeping is conspicuous today in governmental accounting because of its absence. It is possible for the accountant to confide his reporting of revenue and nonrevenue receipts to the "cash

basis" without destroying the necessary information for financial administration and control. We have not reached that stage of development in governmental accounting where the statement of Application of Funds suggested by Professor Frisbee can be used to practical advantage. He states "Accounting should serve the purposes of the administrative officers of the municipality. It should tell the citizens how the funds have been administered. What they need to know is what funds have been raised and what has been done with them. It appears to the writer that a statement of income and expenditures will not obtain this result, unless we accept a broad definition of income in which all sources of funds obtained will be included."

Avoid the use of the term "income" as it applies to this special problem, exclude accruals from revenues, and you have progressed a long way in solving this perplexing problem of accounting for the income of municipalities.

It is the duty of the governmental accountant to furnish the administrative officers of a municipality with financial reports which are clear, understandable and truthful. Important decisions must be made relative to proposed expenditures, there is a demand not only for estimates of revenues to be collected, accrued revenues, but also expendible revenue and nonrevenue receipts. Our financial reports should contain all the necessary information for proper financial and administrative control statements of revenue and nonrevenue receipts will exclude uncollected items which inflate the expendible surplus of operating funds.

It is my personal opinion that the application of funds statement as suggested in this paper does not solve the problem, although it is very desirable.

Our accounting procedure should be simple, and formulated to furnish municipal administrators with conservative, truthful and understandable financial reports on the results of operation.

SURPLUS ACCOUNTS OF IRON AND STEEL CORPORATIONS

RICHARD N. OWENS

SURPLUS has been defined as the amount of the net worth in excess of the par value of the capital stock outstanding. In the case of corporations with no par value stock, it is sometimes defined as the amount of the net worth in excess of the net amount realized from the sale of the stock. There are many kinds of surplus, however, because it arises from so many sources. It may be created by donations to the corporation, by earnings, by the issue or purchase of the corporation's own stock for more or less than par, and by many other transactions. Likewise the surplus may be decreased by a number of transactions, such as operating deficits, dividends, the sale of fixed assets for less than the value at which they are carried on the books, and losses on the abandonment of properties. The purpose of the present paper is to show to what extent corporations, in the iron and steel industry publish information showing what entries have been made in their surplus accounts and what types of entries are made.

I. THE DATA ON SURPLUS ENTRIES

The surplus entries to be considered are those of corporations in the iron and steel industry which have been published by the corporations and reprinted in Moody's *Industrials*. All of the iron and steel companies for which statements could be found were included in the study, the only important companies omitted being subsidiaries of other corporations for which separate statements were not published.[1] The method of procedure was as follows: The surplus as

[1] Important companies not included were Corrigan, Mckinney Steel Co., a subsidiary of the Cleveland Cliffs Iron Co., the Timken Steel Co., a subsidiary of the Timken Roller Bearing Co., and the Wisconsin Steel Co., a subsidiary of the International Harvester Co.

shown by the balance sheet at the end of the year was compared with the surplus at the beginning of the year to determine the amount of the increase or decrease for the year. This figure was compared with the amount of the debit or credit balance carried to surplus from profit and loss as shown by the income statement. If the two did not agree, an effort was made to reconcile the surplus from information furnished by the corporation. In many cases, it was possible to reconstruct the surplus account and explain the difference between the surplus debit or credit as shown by the income statement with the net increase or decrease in the surplus for the year, but in many other cases it was impossible to do so.

The extent to which iron and steel corporations have published the information necessary to a reconciliation of the surplus may be seen from the table 1. The corporations are listed in the order of the dollar value of their assets at December 31, 1934. The amount of the total assets in millions of dollars is given in Column (1) for purposes of comparison. Column (2) shows the total number of years for which surplus statements were studied. The latest year in each case was 1934, and the study was carried back to 1913 where the information was available. Column (3) shows the number of years for which the surplus could be reconciled, and Column (4) shows the number of years for which it could not be reconciled. The last column shows the number of years when the increase or decrease in the surplus as shown by the balance sheet agreed with the balance carried to surplus from profit and loss as shown by the income statement.

The total number of years included in the study for all corporations was 582, and sufficient information for a complete reconciliation of the surplus was available for 386 years or 66.3% of the total. The surplus could not be completely reconciled for a total of 196 years. If the corporation indicated what some of the entries in the surplus had been but not all of them, the surplus for that year was considered as not being reconcilable. Some iron and steel companies, particularly the smaller companies, publish no information relating to entries in their surplus accounts, although entries involving large amounts have been made. In 153 years, or 26.3% of the total, there were no entries in the surplus except the balance carried to it from profit and loss. These 153 years are included in the 386 years for which the surplus could be reconciled. Dividends were of course shown as a deduction in the income statement before the amount carried to surplus was determined, and many corporations also showed appropriations to sinking fund reserves or other reserves in the income statement.

The practices of corporations in the use of their surplus accounts vary widely. Some corporations enter practically all of their gains and losses, including those of a nonrecurring nature, in their profit and loss accounts. For example, the Sloss-Sheffield Steel and Iron Co., in its income statements for several years, included losses on fixed assets sold or scrapped with its depreciation charge, indicating the amount of the loss in a footnote. Other companies which frequently made no adjustments in their surplus accounts because all items had been included in the income statement were the Republic Steel Corporation, the Crucible Steel Company of America, the Inland Steel Company, and the Pittsburgh Steel Company. Other companies included in their surplus accounts many expense and income items which might reasonably have been included in their income statements. Among the companies making large numbers of entries in their surplus accounts were the American Rolling Mill Co., the Colorado Fuel and Iron Co., and the Ludlum Steel Co. Some companies have only one surplus account, while others have capital surplus and various appropriated surplus accounts in addition to the earned surplus account.

The entries made in the surplus accounts of iron and steel companies may be divided into three groups: (1) debit entries reflecting decreases in the income as recorded in the profit and loss statement for prior years or for the current year, (2) credit entries re-

flecting increases in the income as reported for prior years or for the current year, and (3) debit or credit entries for stock or other transactions not affecting income. A fourth class might be added for entries whose nature or effect upon the income statements is uncertain because of insufficient information. These entries will be discussed with the third group.

TABLE 1

SURPLUS STATEMENTS OF IRON AND STEEL CORPORATIONS

Name of Corporation	Assets Dec. 31, 1934 (Millions of Dollars) (1)	Total Years (2)	Surplus Reconciled (3)	Surplus not Reconciled (4)	Years with no Surplus Adjustments (5)
United States Steel Corporation	2,084	22	19	3	0
Bethlehem Steel Corporation	639	22	16	6	7
Republic Steel Corporation	252	22	18	4	11
Youngstown Sheet and Tube Co.	203	13	6	7	0
Jones and Laughlin Steel Corp.	182	12	12	0	6
National Steel Corporation	156	6	3	3	0
Crucible Steel Co. of America	109	22	16	6	13
Wheeling Steel Corporation	107	14	12	2	5
Inland Steel Company	101	22	19	3	9
Interlake Iron Corporation	68	22	12	10	7
Pittsburgh Steel Company	52	22	19	3	10
Colorado Fuel and Iron Co.	47	20	16	4	0
Spang, Chalfont and Co.	34	7	3	4	0
Otis Steel Company	34	15	7	8	4
Gulf States Steel Company	28	20	16	4	8
Sloss-Sheffield Steel and Iron Co.	25	22	12	10	8
Sharon Steel Hoop Company	25	14	5	9	0
Babcock and Wilcox Co.	24	17	15	2	11
American Rolling Mill Co.	23	21	15	6	0
Stanley Works	21	16	6	10	4
Am. M. Byers Co.	19	11	8	3	1
McKeesport Tin Plate Co.	18	8	0	8	0
Allegheny Steel Company	18	9	4	5	0
Alan Wood Iron and Steel Co.	17	5	1	4	1
Davison Coke and Iron Co.	16	2	1	1	0
Continental Steel Corporation	12	7	5	2	0
Acme Steel Company	12	15	3	12	0
Follansbee Bros. Co.	11	20	16	4	0
Keystone Steel and Wire Co.	10	16	5	11	5
Granite City Steel Co.	10	7	6	1	0
Scullin Steel Company	7	8	5	3	1
Ludlum Steel Company	7	16	4	12	0
Laclede Steel Company	7	7	7	0	5
Carpenter Steel Co.	6	9	8	1	0
Superior Steel Corporation	5	17	17	0	8
Harrisburg Pipe and Pipe Bending Co.	4	4	3	1	3
Atlantic Steel Co.	4	22	12	10	6
Apollo Steel Company	3	5	2	3	2
Eastern Rolling Mill Co.	3	14	14	0	7
Cranberry Iron and Coal Co.	2	18	7	11	6
Milton Manufacturing Co.	2	5	5	0	4
Michigan Steel Tube Products Co.	1	6	6	0	1
Total	4,430	582	386	196	1%

II. DEBIT ENTRIES REFLECTING DECREASES IN INCOME

The surplus entries reflecting decreases in income for prior years or for the current year frequently involved losses on assets because of the failure to charge sufficient depreciation or amortization or to recognize certain expenses in prior years. In some cases the over-valuation of the assets not sufficiently

depreciated was continued until the asset was dismantled or scrapped. In other cases the valuation reserves were adjusted through an entry in the surplus account when the error in valuation was discovered. Entries in the surplus account reflecting decreases in income may be classified as (1) entries involving an adjustment of an asset account or a valuation reserve account, (2) entries to record realized losses of an extraordinary nature, (3) entries to set up the liability for an expense not previously recognized, and (4) entries to record extraordinary expenses charged against surplus.

Entries involving an adjustment of an asset or a valuation reserve account. Some of the entries of this kind were those made to correct an error in a charge to profit and loss in a preceding period. The most common adjustment was the charging of additional depreciation on fixed assets. The usual charge was to earned surplus, although the Milton Manufacturing Company in one year charged additional depreciation to capital surplus. The Republic Steel Corporation made "additional provision for obsolescence" through its surplus, while several other companies, among them the Colorado Fuel and Iron Co., made additional provision for depletion in this way. A similar adjustment was made by the Interlake Iron Corporation for "adjustment for prior years coal over-runs."

The book values of intangible assets which are usually amortized through profit and loss charges were sometimes adjusted through surplus entries. For example, the Ludlum Steel Co. and the Babcock and Wilcox Co. adjusted the values of their patents through charges to surplus. Several companies, among them the Ludlum Steel Co., wrote off such items as experimental expenses, experimental equipment, patterns, and drawings through the surplus account. Marketable investments were usually written down to market values through charges to surplus, sometimes through the creation of a reserve and sometimes by credits to the investment account. Several companies, among them the Sharon Steel Hoop Co. and the American Rolling Mill Co. made similar provision for losses on advances to and investments in affiliated companies. The Atlantic Steel Co. made a charge to surplus for "contingent reserve for decrease in insurance fund securities to market value."

In many cases the values of current assets were adjusted through charges to surplus. For example, the Sharon Steel Hoop Co. set up an allowance for shrinkage in inventory values through a surplus charge, and since later surplus statements gave no indication that the balance of the allowance account was returned to surplus, it is assumed that the allowance was used to absorb inventory losses. The surplus statement of the Atlantic Steel Company in one year contained an item for "write-down of inventory to market value." The United States Steel Corporation set up out of surplus a reserve for losses on foreign exchange and also for losses on closed banks. Several companies, among them the Allegheny Steel Co. and the American Rolling Mill Co., made "additional provision for losses on notes and accounts" through charges to surplus. The surplus statement of the American Rolling Mill Co. in one year contained an item for provision for intercompany profits in inventory, while the Otis Steel Co. charged off a part of its inventory of spare parts to surplus.

Realized losses of an extraordinary nature. The most common realized loss was that which occurred when property was abandoned or plants dismantled. Usually the surplus statements did not indicate on what property the loss was sustained, but the Colorado Fuel and Iron Co. in many cases indicated that the loss was due to mines abandoned, or oven equipment, sheet mill, or blast furnace dismantled. Several statements contained a surplus charge for "write-off of plant items previously capitalized," while the Inland Steel Co. charged to its surplus its proportion of the loss of a subsidiary on abandonment. Spang, Chalfont and Co. purchased license rights which it did not use but which it charged off against surplus. The Colorado Fuel and Iron Co. in some years charged off some of its customers' accounts to surplus. These accounts receivable were probably old accounts which had arisen from sales in prior years.

Liability reserves set up out of surplus. The liability reserves set up by charges to surplus usually represented charges which should have been made to profit and loss in one or more prior years. The most common liability reserve set up from surplus was provision for additional income taxes. Other tax reserves included provision for state income taxes and Federal capital stock tax. Jones and Laughlin Steel Corporation set up a pension fund reserve by a charge to surplus, and the Colorado Fuel and Iron Co. made additional provision for workmen's compensation in this way.

Extraordinary expenses. Some of the expenses charged to surplus were those which might have been proper charges to income in prior years while others might properly have been deferred to later years. Some might have been charged to current operations. Babcock and Wilcox Co. and also the Bethlehem Steel Corporation charged moving expenses to surplus, while Spang, Chalfont and Co. wrote off experimental expenses in this way. The A. M. Byers Co. charged the cost of preliminary operations of a new plant to surplus, and the Colorado Fuel and Iron Co. made a surplus charge of extraordinary mining operating expenses. Several companies, among them the National Steel Corporation, charged their unamortized bond discount and expenses to surplus, while the surplus statement of the Colorado Fuel and Iron Co. in one year contained an entry for "amortization of bond expenses and discount." Bond discount and expenses on treasury bonds sold and also premium on bonds purchased were frequently charged to surplus. The Davison Coke and Iron Co. charged its surplus with "interest applicable to prior years" and property taxes on "abandoned property." Additional Federal and foreign taxes for prior years were a common charge against surplus.

III. CREDIT ENTRIES REFLECTING INCREASES IN INCOME

The surplus credit entries which might properly be considered as income applicable to one or more prior years usually represented an excess charge for expense which had been made in previous profit and loss statements. The following classes of entries of this kind may be recognized: (1) Entries reversing a profit and loss or surplus charge of prior years, (2) Cash refunds of payments made in prior years, credited to surplus when the refund was received, (3) Cancellation of liability reserves previously created, (4) Realized gains of an extraordinary nature, and (5) Credits resulting from a change in accounting methods.

Reversal of charges made in prior years. In some cases, it was found that the charges for depreciation or depletion had been too large, and a part of the reserve was carried to surplus. For the same reason, several companies transferred a part of their reserve for bad and doubtful accounts to surplus. The Colorado Fuel and Iron Co. increased its surplus by transferring to it a part of its limestone stripping reserve, and the Pittsburgh Steel Co. made a similar transfer of a part of its reserve for relining blast furnaces. In some cases the surplus statement contained a credit for adjustment of the ore mining investment, specifying that the adjustment related to prior years.

The reserves for losses on securities which were set up in years of declining security prices were usually returned to surplus in subsequent years of advancing security prices. In some cases, the adjustment involved the reversal of an entry creating a reserve which was later found to be excessive. In other cases, the investment account itself was debited to restate the investments at cost.

Cash refunds of payments made in prior years. The most common adjustment of this type was a credit to surplus for refund of income taxes from the Federal government. Other tax refunds included a refund of New York state franchise taxes to the Ludlum Steel Co. and a refund of the United States capital stock tax to Follansbee Bros. Co. Some corporations received cash payments as adjustments of contracts cancelled. The United States Steel Corporation received refunds under the Emergency Transportation Act of 1933 as a result of excess payments made previously by some of its subsidiary

railroad corporations. All of these refunds were credited to surplus.

Cancellation of liability reserves. Many corporations carried to surplus a part of the reserve for income or other taxes set up in prior years and no longer needed, also reserve for mining royalties. The United States Steel Corporation and the Bethlehem Steel Corporation carried to surplus the balances in their reserves set up under the recapture provisions of the railway transportation act of 1920 when those provisions were repealed in 1933. Follansbee Bros. Co. in one year carried to surplus an excess balance in the reserve for product guarantee.

Realized gains of an extraordinary nature. Gains of an extraordinary nature were rather infrequent, but in a few cases there were gains on marketable securities sold. The American Rolling Mill Co. credited its surplus with "profit from retirement of funded debt" and "discount on the company's bonds purchased."

Surplus credits resulting from change in accounting methods. In some cases the corporations wrote off certain expenditures to profit and loss and later decided that the expenditures should have been capitalized. For example, the surplus statement of the Ludlum Steel Co. in one year contained an item for "restoration of capital assets previously charged to expense." The Scullin Steel Co. credited its surplus with "employees' compensation deposits written off in prior years, now restored to surplus." The Wheeling Steel Corporation adjusted its surplus in 1931 to change the basis of pricing inventories, and the Woodward Iron Co. in 1933 made an inventory adjustment through its surplus "to include depreciation, depletion, and taxes applicable to the cost of production and exclude selling and administrative expenses." The United States Steel Corporation in 1917 credited its surplus with an amount representing the "surplus of subsidiaries whose detailed accounts were not previously included."

IV. ENTRIES NOT AFFECTING INCOME OF THE CURRENT OR PRIOR YEARS

The entries in the surplus accounts which did not affect the income of either the current year or prior years may be divided into three classes, as follows: (1) Entries representing a transfer from one net worth account to another, (2) Entries made to record a revaluation of assets either upward or downward, and (3) Entries recording the results of transactions in the corporation's own stock. In addition there were some items whose effect upon the income and the net worth is somewhat uncertain. These doubtful items may be conveniently discussed in this section.

Entries representing a transfer from one net worth account to another. The most common entry of this kind was stock dividends, which represented a transfer of a part of the surplus to the capital stock account. Many proprietorship reserves, representing appropriated surplus, were also set up out of surplus. These included such items as "provision for extensions and improvements" by the United States Steel Corporation, "appropriations for additions to property and working capital" by the Bethlehem Steel Corporation, and "sinking fund payments" by the Superior Steel Corporation. Sinking fund and other reserves were also shown as being returned to surplus by some corporations, among them the Atlantic Steel Corporation. The American Rolling Mill Co. and the Colorado Fuel and Iron Co. credited their surplus accounts with amounts representing reductions in their insurance reserves, which probably were net worth reserves. The Inland Steel Corporation transferred a part of its capital surplus to earned surplus, while the Interlake Iron Corporation transferred a part of its earned surplus to capital surplus.

Changes in the capital stock accounts frequently resulted in entries in the surplus. The Carpenter Steel Co. credited its surplus with an amount resulting from a reduction of the outstanding stock from a par value of $100 per share to a par value of $25 per share. The Ludlum Steel Company made a similar credit when it changed its stock from a no par value to a par value of $1. When preferred stock was converted to common stock, the differences in the exchange ratios of the two kinds of shares were debited or credited to surplus. Thus, the Bethlehem Steel Cor-

poration debited its surplus with an amount for "premium on converting stock." The Sharon Steel Hoop Co. charged its surplus with common stock issued in new financing. Although cash dividends on stock were usually shown in the income statement, the Gulf States Steel Corporation credited its surplus with "dividends on fractional shares returned to the treasury."

Surplus entries from revaluation of assets. These entries were usually made to record an increase in the value of assets following an appraisal, or to reverse entries made in earlier years to record appraisal values. The American Rolling Mill Co. was one of the companies to write up the value of its fixed assets and also its leaseholds following an appraisal. The Ludlum Steel Company reversed its surplus credits following appraisal, eliminating the appreciation in gross plant value, restoring its reserve for depreciation, and eliminating the increase in the value of its patents and processes. The surplus statement of the A. M. Byers Co. contained a debit for the appreciation of abandoned properties transferred to surplus.

Although the usual result of appraisals was an increase in property values, the Colorado Fuel and Iron Co. in 1931 reduced the value of its property in the accounts by $17,000,000 as a result of an appraisal. At that time the common stock account was reduced from $34,050,500 to $8,512,625, a total reduction of $25,537,875. Part of the reduction in capital stock resulted in the creation of a capital surplus and the remainder was credited to the property account.

Other asset accounts adjusted through surplus were goodwill and investments in subsidiaries. Steel companies which wrote off goodwill against either capital surplus or earned surplus were the A. M. Byers Co., the Laclede Steel Co., and the Sharon Steel Hoop Co. The last named company in 1927 apparently created a capital surplus by increasing the value of its fixed assets following appraisal, and then used a part of its capital surplus to write off goodwill. The United States Steel Corporation was one of the companies to charge against surplus a part of the cost of subsidiaries, while the Bethlehem Steel Corporation wrote off that portion of its surplus arising from the purchase of properties.

Entries recording transactions in the corporation's own stock. One type of surplus entry was that arising from the issue of stock. Thus, the Gulf States Steel Co. charged its surplus with the "stock underwriting and expense," while the American Rolling Mill Co. made a similar entry for the "expenses of issue of new preferred stock." The Ludlum Steel Co. in one year set up the cost of issuing preferred stock as a deferred item and later wrote off the amount against surplus. The premium or discount on preferred or common stock sold was frequently entered in the surplus account. The Superior Steel Corporation debited its surplus with "loss on common and preferred stock sold to employees." The A. M. Byers Co. statement shows an item for "loss on the sale of common stock," while the Crucible Steel Co. of America showed a "profit" on the sale of its own stock. The expenses in connection with the redemption of preferred stock were frequently charged to surplus, and the Superior Steel Corporation charged its surplus with "funds used to retire preferred stock." The surplus account of the Ludlum Steel Co. was credited with an item for the purchase of preferred stock at less than the issue price.

A different type of surplus entry was sometimes made in connection with the purchase of stocks of subsidiaries. Thus, the Pittsburgh Steel Co. debited its surplus with expenses incurred in connection with the purchase of a subsidiary, and the Republic Steel Corporation charged its surplus with "expenses incident to consolidation." The Republic Steel Corporation adjusted its surplus to include the surplus of one of its subsidiaries prior to acquisition.

Doubtful items. The surplus statements of iron and steel corporations frequently contain debit or credit entries the nature of which is uncertain or indefinite. When an item is given as "miscellaneous adjustments," the corporation is giving no information at all. If the item is stated as "miscellaneous adjustments, prior years," one may reasonably assume that the items had been charged or credited to profit and loss

or possibly surplus in one or more prior years and are now being reversed, or they were items which should have been charged but were omitted. The same is true of "sundry and extraordinary adjustments." The nature of the entry by the Republic Steel Corporation charging its surplus with "amortization of town site and provision for royalty tax on ore mines (prior years)" is also not entirely clear. When the Carpenter Steel Company charges its surplus with "securities and cash to subsidiary for reorganization," the nature of the transaction is clear enough, but the proper value of the investment in the subsidiary is uncertain.

Reserves for contingencies were frequently set up out of surplus with no indication of what contingency was being provided for. It was also impossible to determine from the published reports what finally became of such reserves, since the balance of the reserve account was usually included with other reserves on the balance sheet. Many companies debited surplus with an adjustment of the book value of investments without indicating whether marketable investments or permanent investments in subsidiaries were being written down, though it might be reasonably assumed that marketable securities were meant. The most significant omission, however, was a failure to publish any surplus statement or to give only a part of the surplus entries, making it impossible to prepare a complete reconciliation of surplus.

The great variety of entries made in the surplus accounts of iron and steel corporations indicates that it is impossible for the stockholder to know what income his corporation is really earning unless he examines both the income statement and the reconciliation of surplus. He must also be able to distinguish between those surplus entries which reflect changes or adjustments of income and those which result from capital or stock transactions. Greater uniformity in accounting practices, particularly in determining what items should be entered in the surplus account and what items should be entered in the profit-and-loss account, is also desirable from the point of view of creditors and stockholders.

The use of the surplus by some corporations as a catch-all for many types of entries makes many of the comparisons which are frequently made much less reliable than they otherwise would be. One common comparison is the dollars earned per share by different corporations in the same year or by the same corporation in different years. A study of the surplus would show that many such comparisons are misleading because the earnings per share are computed from the income statement which tells only a part of the story of the earnings. To get a correct figure for the earnings, the net income as shown by the income statement should be adjusted to take into account the surplus entries which affect income. The same is true of the margin of safety on bonds, the number of times bond interest is earned, the ratio of net income or cost of goods sold to sales, as well as many other ratios and percentages.

SHOULD A FEDERAL TAX BAR BE ORGANIZED?

J. S. Seidman

Income and estate taxes constitute a major source of federal revenue, yet there is no vehicle extant whereby an integrated viewpoint may be expressed or exerted by those actively engaged in tax practice, and therefore presumably having more than average understanding of the intricate legislative, administrative, and practice phases these taxes entail. To be sure, the interested professional societies have tax sections or committees. Also, many trade and general business associations include in their sphere of activity an interest in tax matters, and in many instances through the direction or guidance of tax practitioners. Then there is the National Tax Association. Splendid accomplishments may be the just boast of all these groups, but it is their common lot that Federal taxes are either one item, and not the primary one, on the societies' or associations' agenda, or in particular cases the organization, by its very nature, is limited in roster, so that it does not and may not house together the two professions that are actively, and more than any others, given to Federal tax practice—the legal and the accounting.

Is the absence of such an organization, in face of the fact that Federal income and estate taxes have had a commanding significance for close to twenty years, indicative that no urgent need has been felt for its creation and maintenance, or is it a matter of lethargy, impracticality, or other deterrent. The hope of obtaining a satisfactory answer to this basic question can be predicated only on a dispassionate and realistic analysis of the criss-cross and in some instances the conflict of forces and considerations that enter into the matter. The gamut includes subsumed phases like the concrete feasible objectives of the putative organization, the character of the organization structure especially with reference to scope of membership, administrative location and direction, and finally the sordid financial and budgetary aspects—all going into the hopper and there being challenged as to whether the whole thing is worthwhile or can more effectively be secured through existing agencies either as now constituted or by convenient adjustment. Let us attempt here in somewhat fleeting fashion to study these ingredients and then see what sort of amalgam, if any, is formed.

OBJECTIVES AND PROGRAM

Take first the question of the precise objectives sought to be attained. Giving the ego its primordial and primary rank, this may be paraphrased into "precisely and concretely what can such an organization do for me and I for it" to justify the labor pains of its birth and the time and cost of its rearing. Viewed from the narrow and introspective standpoint of the professions involved, there appear to be several avenues of utility. There is need for the better apprising taxpayers and the professions of the difference between the general practitioner and the tax practitioner.[1] The field is also fertile for a more wholesome understanding all the way around of the separate boundaries and roles of the attorney and the accountant respectively. These functions may well be the province and product of an organization such as here contemplated.

The organization may also "take under its wing" observations and recommendations on the rules of the game (more soberly known as the rules of ethics), and having reached agreement from within, it could then present a coördinated viewpoint in the formulation or maintenance of correlative rules by external agencies, including the governmental departments, professional societies, etc.

Another possibility is the development of a central library for tax briefs (akin to the

[1] It would be a cardinal error if it were implied that members of the Tax Bar, per se, were to be preferred in tax cases over competent general practitioners. It would likewise be fatal to become embroiled in questions of relative competency and incompetency of the members of the Tax Bar.

libraries maintained in the general field by the larger bar associations), thereby affording practitioners the same advantage now enjoyed by the government staff in preliminary research for briefing on a particular tax subject. A number of difficulties would beset the attempt, including location of membership in comparison with the location of the library, the human tendency to want access to briefs of others but to be derelict in automatically supplying one's own briefs, etc. However, it is at least an exploratory item for the agenda.

While on the subject of briefs, it may be too that the association, as such, could in worthy and proper occasions lend its name, prestige, and studied opinion to a brief as amicus curie in important and basic tax litigations, although there is a good deal to the viewpoint, undoubtedly entertained by many, that amicus briefs are sometimes a nuisance and that they should be left to coöperation among the attorneys specifically involved.

Ordinarily, one of the activities regarded as inherent in an organization of the type now being "test-tubed," is the publication of a journal as a medium for the presentation and expression of viewpoint in the technical field. This is generally a costly undertaking in both time and money. However, these expenditures need hardly be incurred in the instant situation, as the available media appear delightfully adequate. To add to them would be unnecessarily augmenting the already overflowing volume of reading matter beckoning for the attention of those who desire to keep abreast with the times.

The association would, insofar as opportunity arose, instinctively provide occasion for professional and social intercourse among its constituents. In its practical implications, that might result, among other things, in the development of satisfactory relationship and understanding regarding forwarding engagements, considering the geographical membership dispersion that is likely to be involved. In this path, however, it would be of the utmost importance that this be confined solely to inter-member relationships and that the organization positively eschew any activity that may result, in the slightest, directly or indirectly, in solicitation by members of engagements from taxpayers. It would be far better that the organization die aborning rather than be a surreptitious instrumentality for personal commercialization under the guise of general welfare.

So much for the phases having to do more or less with the professional innerworkings. Let us review the broader vistas in the outer realm. In matters of legislation, the organization could bring to bear the influence of the tax bar to the tax problems of the nation. The government and the taxpayers are not only entitled to whatever benefits may be derived from the knowledge and experience of practitioners regarding fiscal measures, but they are also entitled to it in coördinated crystallized form. Furthermore, if there be any injustice or inconsistency in the law, whether in the substantive or administrative provisions or in its general philosophy, an integrated tax bar may be able to go far in bringing about correction or amelioration where clusters of smaller and heterogeneous groups might be stymied in their own tracks. It would be essential, of course, that any activity with respect to legislation be inviolably non-political and non-partisan, and be premised on mature study and solidified foundation. Otherwise, activity in the field of legislation could do considerable harm and bring the organization into disrepute.

Going from the legislative to the administrative scene, the association might place high on the list the matter of promoting a better and congenial understanding between the taxpayer and the Government. This could possibly be approached on the one hand through proffer of coöperation with the Treasury Department in drafting of regulations, practice procedure, etc., and on the other, by helping taxpayers gain a more sympathetic understanding of the rules and procedure that might otherwise be provocative of discontent. It may also be that through a unified tax bar any tendency towards excessive Administration assertiveness or instances of arbitrariness, either in general procedure or in specific fields or

cases, on the part of given personnel, may be treated. The association might also work in the direction of retaining the efficiency and sustaining the morale of experienced and competent Department officials and employees by aggressively lending its aid to any program that would minimize shifting or uprooting of personnel purely because of political considerations.

In the judicial sphere, wholesome lines of coöperation may be worked out with the Board of Tax Appeals and the courts. Before the Board, for example, an organization as is here heralded may function as the official representative of the Board's practicing bar, in the same light as bar associations do in relation to courts generally. If the flame of association enthusiasm were fanned solely by devotion to public service and weal, the association activities could also embrace recommendation and endorsement for appointments to the "tax bench" (and for that matter, of tax officials generally).

There are of course other fields and directions to which the integrated voice of a federal tax bar may carry, but it is intended here to be illustrative rather than exhaustive. There would probably be a large majority of the tax bar ready to espouse the indicated objectives. Immediately, however, there logically arises the question as to the best method of reaching the destination. Is a separate organization necessary, feasible, or advisable, or can they be attained through the implementing of existing forces.

NEW VERSUS EXISTING ORGANIZATIONS

Certainly this much may be said at the outset against starting anew. If it is to be merely another organization, it is doomed e'er it sees the light of day. Inertia, time, and finance will blight the roots of its existence. Unless, therefore, adequate reason presented itself for believing, first, that there was more than just lip-service behind any hailing of the program, and second, that the program could not be adequately harnessed and fulfilled by agencies extant, it would appear that the idea of a new association ought to go the way of all flesh.

As to the first, it is difficult to admeasure the degree and virility of practical enthusiasm. It does not augur well to find that after twenty years that federal taxes have been so much in the limelight, sufficient interest did not manifest itself in organizations that have been dealing with the subject, to result in much more headway toward the goal than a current inventory would in fact disclose. It may very well be, however, that this is to some extent traceable to the diversity of organizations and their incomplete coördination, or to the absence of a dominant unifying force through which alone the maximum of accomplishment is believed possible. That brings us squarely to a consideration of the second half of the inquiry, namely, the possibility of utilizing the established sources.

Offhand, the only eligibles would appear to be the National Associations of the legal and accounting professions. Strengthening or reorientating the associations of *either* profession so as to house the tax program outlined would be subject to the deficiency that with both professions so actively engaged in tax practice, either one alone could hardly be declared representative of the tax bar. The next step in the analysis raises the possibility of *both* professions extending their tax sphere and activity, and having an interlink through a committee on joint coöperation. Such an interlink, however, may prove inchoate and indecisive if it be true that Federal taxes are not only worthy of the best thought and attention of the tax bar, but that in addition the tax bar must be so geared as to be in a position to act coordinately, regularly, firmly, and at times speedily. But more dispositive than these considerations is the fact that correspondence with the American Bar Association and the American Institute of Accountants indicates that both these organizations regard the program under consideration somewhat without their respective spheres, and hence could not officially embrace it.

If the professional societies are unavailable, as they seem to be, the thought suggests itself that the National Tax Association may perhaps provide the established fulcrum around which to pivot. The Na-

tional Tax Association has devoted itself in latter years largely to State taxes. But if in its wisdom it saw fit to create a special Federal tax section with activities and policies such as here described, its banner might possibly be furled on high, with the allegiance of the federal tax bar. Here again, however, an interchange of correspondence disclosed that the association was not in a position, at least at present, to expand its activities in the indicated direction.

If these exhaust the possibilities, it would appear—and this is merely a personal opinion—that the best and only bet, assuming that genuine motivation exists, is to mold a new organization that precisely fits into the pattern of things. Such an organization might derive the psychological advantage of a new group being infused with new life, and though starting modestly, develop sufficient momentum to provide a sustaining force. However, though a new organization, it ought not to be a wholly separate one from the standpoint of shunning all others. To the contrary, its most effective results would probably be derived from working in close coöperation with the respective professional societies and perhaps provide an official and respected authoritarian basis for harmonizing their differences and especially adjusting the tax attorney-tax accountant problems.

Assuming that the Tax Bar were to be newly organized, a train of supplemental yet vital questions as to modus operandi would follow in the wake of the basic conclusion. First in order would be scope of membership. Should it envelop all those interested in tax practice, including engineers, appraisers, Government officials, etc., or should it be confined to attorneys and accountants? Furthermore, even in the admissible fields, should membership be on a highly restricted basis, almost in the nature of a badge of honor, or should it aim for numerical strength and inclusiveness. A possible middle-of-the-road path would be to make eligibility depend on admission to practice before the Board of Tax Appeals, and even to designate the association as the Bar of the Board. This would mean that membership would be vested only in attorneys and certified public accountants, and admission to practice before the Board would be presumptive of an interest in tax matters.

Of perhaps greater import than scope of membership would be the problem of administrative direction and policy. It would desiccate the life blood, for example, if the association were used as a means for personal or clique glorification or deification. Likewise an arousal, through the set-up, of the proverbial professional jealousies would be fatal. Headquarters would presumably be in Washington "at the seat of the crime," with probably a paid secretary in the saddle. But as attraction to membership would be on a national scale, the feasibility of regional divisions would be a matter for study. The financial aspect is one that would necessarily assume major significance in determining whether the organization can hopefully embark upon a constructive career. Dues would have to be reasonably modest and justify themselves by association accomplishments.

It would be interesting to canvass the tax bar for an expression of viewpoint on the basic question as to whether and how the bar should be organized. If the poll were by letter, any enthusiasm that would be manifested would of course be inconclusive, in that dictation from the comfort and convenience of one's office is not necessarily to be equated to a readiness or ability to devote the time, effort, and money that getting an organization actually under way will entail. Such a poll, however, would at least helpfully bring to light the lines along which the tax bar is thinking on the subject, and indicate whether any attempt to get together is a futile nightmare, or holds forth possibilities of constructive and beneficial accomplishment.

CURRENT PROBLEMS OF FEDERAL TAXATION

David A. Buckley

During the past year in the field of income taxes we have had a very extensive campaign on the part of the Government with reference to profits made in the United States by foreigners. The Government stretched a point and attempted to tax profits made on transactions consummated on American exchanges although the parties themselves were never in the United States and carried out their trades through brokers. The campaign covered not only securities but also transactions in futures on cotton and grain exchanges.

I will give you a few examples to clarify the above statements.

Let us say John Doe orders his broker in Toronto to purchase General Motors shares. The broker, if a local broker, enters into an account with a New York Stock Exchange broker and buys for his own account, thereafter carrying the shares for account of his customer or delivering. When the shares are sold, the broker sells for his own account and credits his customer. The Government thereupon ascertains from the New York broker the account and calls upon the Toronto broker to pay a tax upon his profits or reveal his customers. If he reveals his customers, he, the broker is absolved and the customers each receive a letter demanding the tax upon the profits. Our good friend, John Doe, receives this letter and is very much wrought up about it, particularly as in Canada and in England such profits are not taxable unless they constitute a business, that is, a principal occupation.

Of course John Doe might laugh at another Government but as a rule he is either a conscientious or careful business man and may have many business dealings in the United States. He is, however, quite aware of the fact that the United States is not in an enviable position insofar as the collection of the tax is concerned. A sovereign cannot sue to recover taxes in a foreign country. Unless the United States is in a position to collect by distraint, it is obliged to reconcile the difficulties of the position.

We have no public record of the result of this general campaign but attorneys conversant with such cases are aware that compromise of the liability is usually the course of final settlement adopted.

The amount of tax collected in such a manner has always been relatively small and the damage done to business very large. The liability to tax is questionable as vital points of jurisdiction and agency arise which have really never been settled in the law but which as common sense would indicate have great strength.

The point is even better taken in cases involving hedges. Let us say an English merchant is a heavy purchaser of cotton. To protect himself against loss until the cotton is delivered to his customer or against other dangers in price fluctuation, the English merchant hedges, that is, he sells futures on the New York Cotton Exchange against his spot purchases. Later when the spot cotton is delivered, he closes out his hedge by buying futures and crossing his sale. When he closes out his hedge by buying on the Cotton Exchange, he has a profit if the market has fallen in the meantime. If it has risen, he has a loss. Whatever happens is offset by his sale of the spot cotton delivered to his customer. His hedge sale and covering purchase has been nothing but an insurance. If he has a profit on the New York Cotton Exchange, he has a corresponding loss on his cotton actually purchased in the United States and sent abroad to his customer. The potential taxation of such transactions drove a great deal of hedge business to Liverpool and other markets and actual cotton purchase to Brazil and other markets. Fortunately the New York Cotton Exchange took a firm position and the Government so far as may be observed took a less technical position with the result that the situation has adjusted itself. Grave question arises whether jurisdiction exists to tax or whether on an inventory basis an offset does not exist. However long litigation on such points becomes moot as traders and merchants

must have certainty and continuity to conduct business.

All of the above remarks are directed of course to nonresident aliens. A resident alien is taxable upon his entire income from all sources. It has always been a question in my mind to what degree a resident alien could be controlled, but no question exists with reference to a citizen. A citizen is taxable upon all his income everywhere. The citizen to avoid double taxation must rely upon credits for taxes paid in foreign countries to offset income taxes in the United States. A nonresident citizen is not as is sometimes popularly conceived exempt from income taxes in the United States. If the income is earned income outside the United States and the citizen is a bona fide nonresident at least six months of the year, he is exempt. In other words a citizen is *only* exempt as to earned income from sources outside the United States. To avoid being taxed twice on all other income he must rely upon tax credits.

The question of double taxation is a basic factor in the above instances. A new principle, that of split taxation, is created in the hedge transaction. By splitting the whole and isolating the hedge dealings on the exchange a profit appears which in reality is not a profit at all. I am speaking in terms of business and not in terms of economic concepts.

Of course whether we call it double or split taxation, it is in all instances international. Conventions have been held and reciprocity established between nations to the extent that most of the older examples of double taxation have departed. However what I have described above is a relatively recent outbreak in a form not heretofore considered and which, from the general welfare and the damage caused to business, it is hoped, will not recur.

Parenthetically it may be stated that such situations as are described above are most puzzling abroad for the reason that as a rule they refer to transactions consummated over a long period of years. Under our system of taxation the statute of limitations commences to run against the Government only after a tax return has been filed. Inasmuch as very few foreigners would have cause to file a return, all their transactions for many years past were subject to possible and indeed actual taxation. Such a situation is awkward to explain and difficult to solve.

During the past year in addition to the type of action as described, long steps forward were taken in the courts. I deal in this paper only with questions of income taxation. New forms of taxation, such as processing taxes to create special funds and social security or wage taxes to create social protection are pending in the courts and it is quite useless at this point to express the many different points of view as to their constitutionality. It would certainly provoke an interesting discussion but inasmuch as the form of tax is quite simple, it is really and exclusively a question of constitutional law. If the form of tax is considered an excise tax the question of uniformity within the class is required which probably exists. Another principle is as to whether the tax is confiscatory in which event it would link itself so closely to the purpose as to parallel the child labor cases wherein the tax was held unconstitutional. The field is broad and the question purely constitutional.

Aside from new forms of taxes the Board of Tax Appeals has been grinding out thousands of cases and creating in coral fashion a minute citadel of precedents. More and more cases have found themselves high in the courts.

It was my privilege during this past year to be identified with one case in the United States Supreme Court which created a new principle and a new protection for the taxpayer. Alonzo H. Bull died in 1920 and at the time of his death was a member of a partnership. The firm agreement provided that a partner's estate would be entitled to a share in the profits during the year succeeding the date of death, such share to be equal in extent to the amount of the descendent's share in the firm. The Government valued the interest in the firm at the date of death and for purposes of estate tax included in such value the total amount of profits received in the year subsequent to death. The

amount was around $200,000. The Government thereupon also taxed the profits as income and subjected the estate to an income tax. This was taxation with a vengeance, the same amount being taxed first as a part of a part of the corpus of the estate and later as income. The Government in 1925 proceeded to collect the income tax having already collected the estate tax. By the time the income tax was collected the estate was barred from recovering the estate tax. The estate thereupon decided to sue for the return of the income tax and in doing so pleaded in the alternative that at the time the income tax was collected the estate was really entitled to a credit of the estate tax and that the Government charged with this knowledge should have credited the estate tax. The Supreme Court upheld this theory on the principle of what is known as recoupment. In fact at the time suit was commenced the statute of limitations had expired with respect to recovery of the estate tax so that the decision is a landmark in establishing a form of protection where the Government has overstepped the bounds. The court in this case regarded the tax upon the income as correct but refused to consider such amount as a part of the corpus. During the course of the argument the court was quite interested in seeking a remedy to rectify the act of the Government and, all in all, it was quite inspiring to see the acute and powerful minds of the court finding a method which was fair and yet not destructive.

The principle of recoupment expressed in this case and the language of the court is well worth a case study in the development of a difficult point and a new theory in the law of taxation.

I have in these few remarks endeavored to explain certain administrative actions and one leading court case of recent vintage. I have not attempted to enter into a great detail but rather to give an idea of the major questions involved and thereby advance perhaps a view from the bar of practical problems.

Generally speaking the case in the Supreme Court demonstrates to what extent our citizens are protected. It is true in this instance that the taxpayer had paid the tax and had sued to recover. However in the A. H. Bull Estate case the taxpayer had presented its case to the United States Board of Tax Appeals and after its decision, under the rules then existing, could appeal to a Federal Circuit Court of Appeals or pay and sue in the Court of Claims or a Federal District Court. The taxpayer chose to pay and sue in the Court of Claims for the refund of its payment.

I presume that many in this meeting are familiar with the procedure or at least the principles in the practice of tax law. If you are not, a visit to the United States Board of Tax Appeals, either in Washington or in its field work held in the larger centers of the country will acquaint you with a very formidable part of the machinery of our tax system. I do not know offhand how many cases the Board decides during a year but since its organization in 1924, it has docketed over eighty thousand cases. Roughly speaking eighty per cent of the cases docketed are settled in one manner or another before the technical committee of the Bureau of Internal Revenue. The balance are tried in the manner of a court trial and raise questions and present facts of an historical and economic nature, creating in the ramifications of evidence vast archives of business chronicles, showing the value of business, the history of great mercantile families, the intricacies of reorganizations in our vast industrial and financial combinations.

It is the only consistent public source of great business battles and therefore in time, its dockets which are public records will be a source of great research by men in your profession seeking light upon reasons, economic or individual, and facts, beyond concise balance sheets and meagre public knowledge.

COMMENTS BY JAMES L. DOHR

Owing to the fact that I did not see Mr. Buckley's paper until a few minutes before it was presented, I find myself in somewhat of a predicament. Without having the paper before me, I considered its title, tried to anticipate what Mr. Buckley would have to say,

and made my notes accordingly. I find now that I guessed badly and that none of my notes are germane to the paper. Fortunately we have the lawyers with us this morning and I can use a well known legal device to extricate me from my difficulty. I will assume, Mr. Chairman, that the meeting has "jurisdiction" of the subject matter, and that my remarks on that subject matter will be in order even though they are not particularly "relevant" so far as Mr. Buckley's paper is concerned.

It has long been assumed, I think, that the problems of civilization are to be solved by the method of *specialization*. From the earliest times men have divided the labor of society so that each member might do that for which he had a special aptitude, knowledge, or training. At first we had farmers, herders, small tradesmen, artisans of various kinds, warriors, etc. In modern times we have the professional group including doctors, dentists, lawyers, engineers, architects, accountants, etc. As the problems increase we find further subdivision within these groups with the idea that their members may develop greater skill by acting exclusively within a narrower field. We live today in an age of specialization, trusting the solution of our problems largely to a wide group of "specialists."

Without in any way disparaging the splendid achievements of specialization, I venture to suggest that the specialists are in themselves a serious problem. From them we get the best advice in so far as their particular fields of activity are concerned, but who is to *coordinate* their respective viewpoints and efforts? In the very nature of things the specialist considers the situation from a comparatively *narrow* point of view. It becomes increasingly apparent, however, that modern problems must be solved on a very *broad* basis, and that the soundest man is the one who sees the problem in its widest aspects. We need two things. We must develop "generalists" who will coordinate the advice of the various specialists. In addition we must, so far as we can, make the specialists in one field learn to understand and appreciate the viewpoint of the specialists in other fields.

The necessity for coordination is aptly illustrated in the subject matter we now have before us. Practice before the Treasury Department in the matter of income taxes is an important phase of the tax problem which involves a combination of legal and accounting questions. To make my point clear, let me analyze in as nearly a chronological manner as may be, the entire process:

(1) Advice to taxpayers as to the effect (taxwise) of proposed transactions.

(2) Advice and assistance to taxpayers in the recording of the business facts upon which tax liability is predicated.

(3) Advice and assistance to taxpayers in the preparation and filing of returns.

(4) Conferences with revenue agents in connection with the examination of returns.

(5) Filing of claims for refund.

(6) Filing letters of protest, attendance at hearings and the submission of evidence (affidavits).

(7) Conduct of appeals to the United States Board of Tax Appeals, including the filing of a petition, the preparation of evidence, the trial of the issues, the preparation and filing of briefs, and such motion practice as may be necessary.

(8) Suits in the District Courts and Court of Claims.

(9) Appeals to Circuit Court of Appeals and Supreme Court.

While a knowledge of the tax law and the regulations issued thereunder is essential throughout, I think I am safe in saying that in the earlier stages the matter is largely one of facts and therefore a matter of accounting, while in its final stages the matter becomes entirely one of law. The assembly of facts and the preparation of the return are matters for accountants; Board of Tax Appeals and court practice are matters largely for lawyers. In between both professions are involved and coordination is essential throughout.

I am glad to see a joint session of lawyers and accountants on this particular subject. Each group has something to learn from the other. In times past lawyers have been prone to berate the accountant; the accountant in turn has expressed himself freely on

the limitations of the lawyer. This is a healthy state of affairs. We must learn, however, to work together, and I trust we will take this opportunity to discuss tax litigation from our respective viewpoints so that each may learn his limitations and profit thereby through the better conduct of tax cases.

A TENTATIVE STATEMENT OF ACCOUNTING PRINCIPLES AFFECTING CORPORATE REPORTS

Following the publication of A Statement of Objectives *of the American Accounting Association in the March issue of* The Accounting Review, *the Executive Committee, governing body of the Association, has authorized the publication of the appended tentative statement of accounting principles, relating primarily to corporate reports.*

In the present statement the Committee has attempted to set forth some of the bases upon which accounting statements rest; it has not tried to establish the postulates of all accounting theory and procedure. The following should be regarded as an experimental formulation of principles having application to perhaps the most significant part of the accountant's field of endeavor. It is hoped that their publication may arouse discussion and that a more comprehensive formulation will develop.

In the drafting of the present statement, aid was sought and secured from the Association's Advisory Committee, and a majority of the members have approved it. The statement has benefited from the Committee's discriminating criticisms.

Comments by readers on this statement will be welcomed by the Editor.

The most important applications of accounting principles lie in the field of corporate accounting, particularly in the preparation of published reports of profits and financial position. On the interpretation of such reports depend so many vital decisions of business and government that they have come to be of great economic and social significance.

Every corporate report should be based on accounting principles which are sufficiently uniform and well understood to justify the forming of opinions as to the condition and progress of the business enterprise behind it. No layman on casual inspection of a set of financial statements can arrive at a thorough understanding of a corporation's affairs; but it should be possible for a person moderately experienced in business and finance to examine such statements with the expectation of deriving from them the basic facts on which at least tentative business judgments may be premised.

Standards of public-accounting practice already established provide for uniformity in audit procedures and in the treatment of numerous items entering into balance sheets and statements of profit and loss. Instances of inadequate verification of primary data are noteworthy because of their relative infrequency. There are, however, a number of rather fundamental questions of principle which have not been solved in understandable terms. These questions require constructive answers.

The subject may be approached by considering the features of corporate accounting practice, as reflected in published financial statements, that involve such uncertainties as to render accounting information frequently valueless for purposes of comparison as between corporate enterprises, or even as between successive financial statements of the same enterprise. The difficulties encountered are found to center chiefly in the following aspects of corporate accounting:

A. Costs and values
B. Measurement of income
C. Capital and surplus

In each of these three phases of accounting, business managements as well as public accountants have traditionally permitted themselves much freedom of action. The accounting expression of conditions and results takes a great variety of forms, and interpretation is often impossible without extensive supplemental data, including the provision of common denominators through which comparisons may be effected.

Business enterprises are so different in nature that the principles applied to any single corporation must make allowance for its individual characteristics and for the characteristics of the industry as well. In fact, it may be said that any complete statement of fundamental principles must include suitable explanations, extensions, and qualifications in order to provide for special circumstances. With this understanding, however, it should still be possible to agree upon a foundation of underlying considerations which will tend to eliminate random variations in accounting procedure resulting not from the peculiarities of individual enterprises, but rather from the varying ideas of financiers and corporate executives as to what will be expedient, plausible, or persuasive to investors at any given point of time.

A solution of this problem has been sought by attempting a tentative statement of certain basic propositions of accounting which embody standards of adequacy and reasonableness in the presentation of corporate financial statements. In most instances these principles represent levels of accounting practice departures from which now are viewed with concern by many practitioners and financial analysts. They do not by any means cover all the points at which difficulties have been experienced, but they are designed to furnish a suggestive starting point for a comprehensive theory on which more detailed standards can be built.

The basic assumption made here is that a corporation's periodic financial statements should be continuously in accord with a single coordinated body of accounting theory, and that the purpose of the statements is the expression, in financial terms, of the utilization of the economic resources of the enterprise and the resultant changes in and position of the interests of creditors and investors. Accounting is thus not essentially a process of valuation, but the allocation of historical costs and revenues to the current and succeeding fiscal periods. Each of the following propositions embodies a corollary of this fundamental axiom.

Costs and Values

1. The accountant's valuation of physical assets at any given point of time involves the determination of what part of original cost should be written off to reflect consumed, expired, or lost usefulness, and what part should be carried forward as reasonably applicable to future operations.

2. Where a substantial change in beneficial ownership has occurred, cost is measured by cash outlay or by the fair market value of property acquired in exchange for securities.

3. Recognition invariably should be given to depreciation, depletion, and all other diminutions or expirations of cost, even when the amounts thereof are not subject to precise measurement and must be estimated. Estimations of costs applicable to future periods must be based upon business judgments, seasoned experience, and expert opinion, rather than rigid formula. In each enterprise and each industry reasonably consistent practices should be developed for determining the portion of a past cost that properly may be carried forward to future periods.

4. Costs charged off in accordance with these principles should not be reinstated as assets subject to reamortization, except as required corrections are reflected in revised income statements for each period affected.

5. The application of these principles should be broad enough to cover amortization of fixed assets through allowances for depreciation, depletion, and obsolescence, and reductions of inventory and investment costs to amounts allocable to succeeding periods.

6. The excess of the gross amount of an obligation over the net proceeds received therefrom represents interest payable at ma-

turity, and on a balance sheet the unaccrued portion of such interest should appear as a reduction of the face value of the indebtedness.

7. If values other than unamortized costs are to be quoted they should be expressed in financial statements only as collateral notations for informative purposes.

The principles of cost and valuation briefly stated in the foregoing paragraphs are sufficiently definite to provide a common basis for asset-valuation procedure. They should be applied with enough flexibility to meet legitimate business and financial needs under all ordinary circumstances. An extreme change in the value of money might vitiate the usefulness of cost records but there seems to be no sound reason for repeated adjustments of asset values for the ordinary changes in price levels commonly experienced from one generation to another.

The adoption of this basis for carrying assets in the accounts would eliminate the heterogeneous results of much recent corporate accounting practice. Present procedure is unsatisfactory in that it permits periodic revaluation of assets, up or down, in accordance with current price levels and expected business developments. Occasional uncoordinated "appraisals" produce in the average financial statement a hodgepodge of unrelated values of no explicable significance to the ordinary investor, if indeed they have any to the managements of the enterprises affected. A history of cost and cost amortization is a consistent record of actual occurrences measured according to an intelligible formula, and constitutes an essential starting point in financial interpretation.

Every business enterprise should eliminate from its accounts those costs which are applicable to assets no longer useful or salable, and should reduce the carrying values of assets in use or ultimately to be marketed to such amounts as may reasonably be expected to be recoverable in the course of future operations. It would seem to be beyond the ability of the accountant to establish the propriety of some new basis of valuation which has no relation to past outlays or experiences of the business or industry.

Many enterprises have no records that would permit an accurate determination of the original cost of their older assets still in use. The application of these principles might have to date from a selected point of time rather than cover all past transactions. Consistent application of these principles over a period of years would eventually yield accounting statements in which the asset values would derive from the single basic postulate of cost, original or unamortized, rather than reflect uncertain and inconsistent financial policies.

Measurement of Income

8. The income statement for any given period should reflect all revenues properly given accounting recognition and all costs written off during the period, regardless of whether or not they are the results of operations in that period: to the end that for any period of years in the history of the enterprise the assembled income statements will express completely all gains and losses.

9. The income statement for any given period should, where necessary, be divided into two sections, one showing particulars of operation for the period, measured as accurately as may be at the time, and the other showing realized capital gains and losses and extraordinary credits and charges resulting from income realization and cost amortization not connected with the operations of that period.

10. The operations section of the income statement should disclose the gross revenues from sales made and services rendered; the elements of operating cost and expense incurred, including the amount of depreciation and other amortization of assets applicable; the amount of interest incurred on borrowed money, including debt discount and expense properly amortized during the year; income and profits taxes accrued; and all other increases or decreases in the equity of stockholders resulting from transactions of the period which are of a normally recurring nature.

11. The operations section of the income statement should be followed by an appropriate listing in reasonable detail of capital

gains and losses, extraordinary charges and credits to income, including substantial adjustments applicable to but not recognized in prior years, extraordinary gains, losses and amortization resulting from factors other than current operations, gain or loss from the discharge of liabilities at less or more than their recorded amount, and other comparable items.

12. The income account of a corporation should not include credits or charges resulting from profits or losses on transactions involving the issuance, purchase, or retirement of its own stock; from any adjustment of the capital accounts; or from dividend payments or stock-dividend distributions.

13. When the income for any period or series of periods is found to have been inaccurately stated to such a degree that it is desirable completely to recast the accounts, at least one published report after such revision should include a corrected income statement for each prior period for which adjustments have been made.

The objective of the principles outlined in the foregoing paragraphs is to develop a report of corporate income for each fiscal period which not only reflects fully the items affecting current operating results, but also indicates what adjustments have been made to allow for gains or losses which are not strictly applicable to the current period but which have been recognized in the accounts during that period.

With the emphasis given to statements of corporate earnings "per share," and to other measures of corporate performance, a common yardstick is demanded. Since it is not possible to measure precisely at the end of any year all the values which have been acquired or dissipated during that year, it becomes important to encompass within a single statement, not only the best possible measures for the year's results, but also the best possible measure of such corrections as seem necessary in the statements already made for prior periods.

If material losses or gains recognized during the current period actually apply to earlier periods, either of two alternatives might be adopted: to show the extraordinary charges or credits in the current income statement or to restate the income statements of the proper number of past periods. Should the latter alternative be adopted, the revised statements of past periods should accompany the statement for the current period. It seems obvious that in any series of statements of corporate results adjustments of previously stated profits should not be excluded—adjustments which have been known to outweigh the total stated gain or loss for a considerable period of years.

Income statements for a series of periods should not be distorted or artificially stabilized through the practice of creating large operating reserves in certain periods and charging to such reserves losses in succeeding periods which it is desired not to reflect in the current income statement. Surplus set aside for contingencies or for other purposes does not lose its identity and should ultimately be restored intact to surplus account. Any loss arising from such contingencies should be reflected not in the reserve but in the income statement of the period in which the loss is incurred.

Capital and Surplus

14. Two major divisions of the capital of a corporation should be recognized: paid-in capital and earned surplus. Subdivisions of each section should appear as may be appropriate.

15. Paid-in capital consists of amounts received for shares issued: capital stock, paid-in surplus, gains from the sale of reacquired shares and from the retirement of reacquired shares purchased at a discount, and transfers from earned surplus to capital-stock account by means of the stock dividends, recapitalizations, or otherwise. Reductions of paid-in capital accounts may arise from the redemption of outstanding shares, retirement of reacquired shares, or liquidating dividends.

16. The cost of reacquired shares of capital stock should, if the shares are reissuable, be regarded as an unallocated reduction of capital and surplus rather than as an asset; if the shares are not reissuable, or if they acquire the status of unissued or retired

shares, such cost should be charged to capital-stock account up to the amount by which capital has been formally reduced; any balance remaining should be charged to paid-in surplus up to an amount not in excess of the prorata portion of paid-in surplus applicable to the shares; any part of the cost which cannot be thus absorbed should be charged to earned surplus.

17. Neither paid-in surplus nor surplus reserves should be availed of for the absorption of losses. Charges for all cost amortization, losses recognized, and other asset values expired should be by way of the income account to earned surplus.

18. Earned surplus should be credited or charged only with the following: the balance of the income account, as periodically reported; distributions to stockholders; the excess of the cost over paid-in capital of shares purchased for redemption, or of reacquired shares retired; and reductions of surplus reserves, set aside for such purposes as the protection of working capital or the coverage of sinking funds. Earned surplus should include no credits from transactions in the company's own stock or transfers from paid-in capital or other capital account.

19. Where by proper corporate action a deficit has been absorbed through a reduction of par or stated value of capital stock or by transfer to paid-in surplus, earned surplus thereafter should be so labeled as to indicate that it dates from a point of time subsequent to the inception of the corporation.

20. Periodic reports should include analyses of capital stock and surplus accounts in sufficient detail to disclose the nature of the changes taking place during the accounting period, including increases and decreases in paid-in capital resulting from sales or purchases of shares.

The application of satisfactory accounting principles to paid-in capital and surplus is handicapped in some degree by conflicting provisions of corporate laws. It is not necessary, however, to adopt in accounting practice the expedients permitted under any given law. The principles suggested above represent at most some restriction of procedures which may have been legalized but which plainly are not in accord with good accounting and finance.

The objective of these propositions is to make an effective distinction between capital contributed to the corporation by stockholders and capital accumulated as a result of earnings from operations or from sources other than stock transactions with stockholders. A strict observance of this objective requires that no portion of a stockholder's contribution be credited to earned surplus but that a repayment of a stockholder's equity may, in fact, be a distribution of earned surplus if the amount of the repayment exceeds his portion of paid-in capital.

If income and profits are to have any meaning, the factors influencing them must be isolated and their net result expressed in a separate account or section of the accounts. This is possible if all profits or losses are carried through a single medium to the earned-surplus account. It is impossible if accounting procedure permits the creation of various types of operating or surplus reserves to which may be carried expense charges or income credits.

When capital has been contributed to a corporation for permanent use, or has been dedicated to that use through the issue of a stock dividend, it should not be used later to increase earned surplus, either through absorption of losses or write-offs, or through direct credit. It may be, however, that corporations which have accumulated a deficit in earned surplus should be permitted, through a recapitalization approved by stockholders, to eliminate the deficit, with the understanding that future statements of undivided profits will designate the point of time from which the new surplus dates.

The foregoing propositions relate to the accounts of individual corporate enterprises. They do not touch on the problems involved in intercorporate relationships, including the preparation of consolidated balance sheets and income statements. These require extended separate treatment. Application of the indicated principles to all corporations should bring about important improvements in the maintenance of corporate accounts and the presentation of periodic financial statements.

THE ACCOUNTING EXCHANGE

Annuities Illustrated by Diagrams

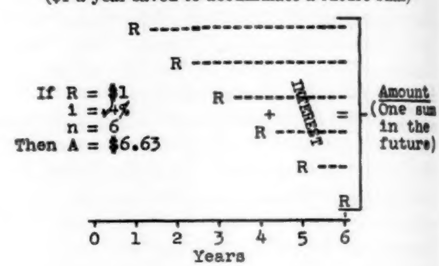
It is good educational psychology to explain difficult topics by simple diagrams. The forces of supply and demand have long been explained by diagrams in economics books. The circulation of money has been frequently shown by diagrams. Numerous other instances might also be mentioned. There is, in fact, no value in keeping a thing difficult which might be made simple and easily understood by a diagram.

Why, then, have annuities not been put in some graphic form? Of twenty textbooks on mathematics of finance, mathematics for business, and the like, that were examined, not one shows any type of diagram to aid in the understanding of annuities. Annuities constitute the axis of the entire field of actuarial science. Innumerable business problems are entirely or in part annuities; and they are found in accounting and insurance, and even in corporation finance and public finance. Surely the two principle types of ordinary annuities and their four kinds of problems cannot be explained in any one paragraph or page of a book. But they can be shown in diagrams which clearly reveal their exact nature and which can be remembered much longer than any well worded page.

The graphic method of showing annuities which is given here can be used for many types of annuities and kinds of problems. The horizontal scale gives the time in periods from left to right. The vertical scale is used only to show the sequence of rents of the annuity, the first at the top and the last at the bottom. The interest is shown as an addition to the rents in order to give the final amount or as an addition to the initial present worth in order to give the rents. The horizontal lines indicate that the annuity can be considered as several problems in which interest is earned and that the annuity is but the total of the several problems.

Note the diagram for the first type of an annuity, the amount of an annuity. Such an annuity may be illustrated by an annual rent of one dollar a year saved to accumulate a future sum at the end of six years, the contributions earning four per cent compound interest. The large sum at the end is being sought.

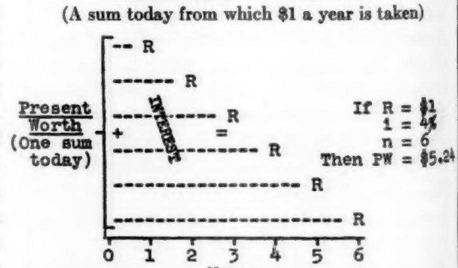
Amount of an Annuity
($1 a year saved to accumulate a future sum)



As one dollar for six times makes six dollars and as there is some interest earned, the amount at the end must be more than six dollars. It is exactly $6.63. There are six rents and six periods, and each rent in the above diagram is at the end of a period.

Note the diagram for the second type of an annuity, the present worth of an annuity. Such an annuity may be illustrated by a sum today from which a rent of one dollar a year is taken, the balance of the fund earning four per cent compound interest. The large sum at the beginning is being sought.

Present Worth of an Annuity
(A sum today from which $1 a year is taken)

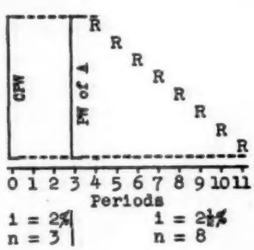


As some interest will be earned on the balances remaining in the fund, less than six

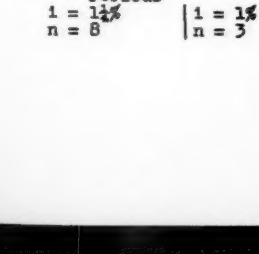
dollars is needed at the beginning in order to withdraw one dollar a year for six times. Exactly \$5.24 is needed. There are six rents and six periods, and each rent in the above diagram is at the end of a period.

Annuities with a deferred element may be deferred annuities or annuities with a deferred amount. Let it be noted that the same general scheme may be used here. Notice that for each of the two examples given the diagram has two parts: one in which the annuity is shown as above and one for the deferred element in which a principal earns interest.

Example—A. M. Jackson wishes to have \$300 each six months for 8 times, starting 2 years from today. How much should be set aside today if 4%, compounded semiannually, is earned in first 1½ years and 5%, compounded semiannually, in the time thereafter?



Example—If H. E. Wallace, Inc., saves \$3,000 each 3 months during 2 years but does not use the money until 2 years and 9 months, how much will there be at the end of the entire time? The interest rate will be 5%, convertible quarterly, during the 2 years and 4%, convertible quarterly, thereafter.



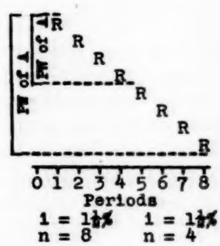
If similar annuities with a deferred element are thought of as the difference between two annuities, that also can be shown by very simple diagrams.

Example—Brisch & Company leased a factory building for 2 years on the following terms: \$1,000 at the end of each quarter during the second year. If money is worth 6%, compounded quarterly, what was the value of the lease at the time that it was made?

The larger annuity—Assuming: 8 rents were to be paid.

The smaller annuity—The 4 rents that were not to be paid.

The difference—The 4 rents that were to be paid.

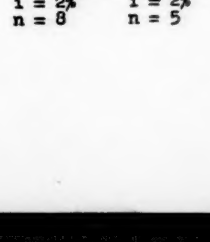


Example—If the Shaeffer-Wahr Construction Company deposits with a trustee, \$4,000 each half-year for 3 times and the deposits earn 4%, compounded semiannually, how much will be available at the end of 4 years?

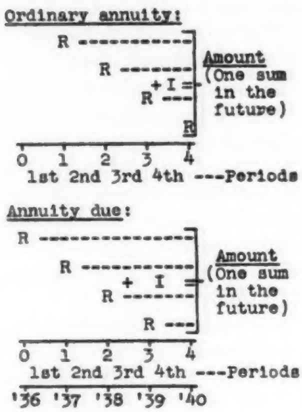
The larger annuity—Assuming: 8 rents are to be deposited.

The smaller annuity—The 5 rents that are not to be deposited.

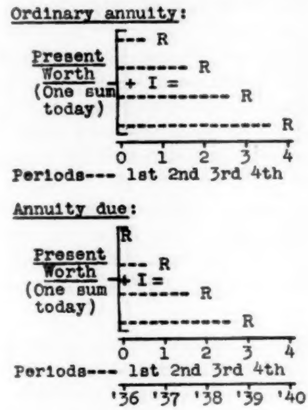
The difference—The 3 rents that are to be deposited.



Amount of an Annuity



Present Worth of an Annuity



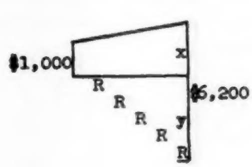
By the same type of diagrams, the relationship between ordinary annuities (with their rents at the end of the periods) and annuities due (with their rents at the beginning of the periods) can be easily shown. As the rents in the amount of an annuity due are at the beginning of their periods instead of the end, all the money earns interest for one extra period. As the rents in the present worth of an annuity due are one period nearer the present worth, all the money cannot earn interest for the extra period; and the present worth must be that much larger at the start.

For the reason that there must be interest for one more period in the case of annuities due, the ordinary annuity formulas (whether for the amount of an annuity or the present worth of an annuity) must be multiplied by $(1+i)$.

Some other problems which constitute a miscellaneous group may also be examined. Here the same type of diagrams are used to analyze and interpret more difficult problems.

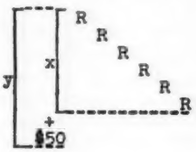
Example—The Port of Portland, a municipal corporation, has a $620,000 bond issue due 12 years hence. If it is assumed that 4½%, compounded semiannually, can be earned during the first 5 years and 3½%, compounded semiannually, during the rest of the time, what equal sum set aside each six months would provide for the payment of the debt when due?

Example—Richard Van Buren has a three-year option to purchase the timber land of Harold Jenkins for $6,200. If



$1,000 is set aside today, how much must be saved each quarter during the three years—all sums earning 6%, convertible

quarterly—so that the purchase could be made three years from today?



Example—If the H. L. Weeks Company sells a machine for $50, due in 30 days, and thereafter $30 a month for 11 months, and if money is worth 6%, convertible monthly, for what is the company really selling the machine?

It is the opinion of the author that these diagrams clearly show the essential characteristics of all types of annuities and also aid in determining the several steps necessary for the solution of complex annuity problems.

J. DONALD WATSON

A MEMORANDUM FROM JOSEPH WHARTON

The following document was found recently in Philadelphia:

American Nickel Works
Wharton Iron Furnace
Hibernia Iron Ore
Batsto & Atsion Lands.

Office of JOSEPH WHARTON
No. 206, Philadelphia Bank Building
Philadelphia, December 12, 1895

I find the proposed course of studies for Wharton School generally good, but mark that

1. Accounting deserves more attention. This subject of course includes Bookkeeping, and it should be taught so as to show various methods, beginning with a simple cash book for household or personal expenses and leading up to the elaborate system of a great corporation and of a government. This is a wide field and is of the first importance: it must not be slighted.
2. Constitution of Pennsylvania and Charter of Phila. should be taught as well as Constitution of U. S., the relations of these three interlocked governments to each other should be made clear. As an exercise in this connection I suggest that the Senior class should examine the differences between the laws of the several states concerning marriage, partnerships, taxation, or such other subject as the faculty may indicate.
3. Journalism. I do not clearly understand what is meant by this. No doubt quick apprehension of passing events and of their relative importance, as well as rapid and clear statement thereof is good training, but should not be allowed to usurp undue attention.
4. I recommend Shaw's Municipal Government in Great Britain as worthy of study in its proper place.

JW

BOOK REVIEWS

Accounting Procedure for Standard Costs. Cecil Merle Gillespie. (New York: The Ronald Press Company, 1935. Pp. xviii, 371. $5.00.)

Those who have taught standard costs as part of a course in cost accounting have at times been handicapped by the lack of a clear-cut presentation of standard cost procedure in the usual cost accounting text. It has been necessary either to supplement the text or to leave the students with only a rather general idea of standard costs. Recent texts and revisions of older texts have shown considerable improvement in this respect and have probably reached the point where they cover the requirements adequately for this area of a general course in cost accounting. For the student who is specializing in accounting the subject is worth more attention, particularly if budgetary procedure for production costs and selling costs are included in it.

Professor Gillespie's book is designed for college classes in standard costs and for advanced cost accounting courses in which the instructor wishes to devote more than the usual time to standard costs. The theory of why aspects of the subject are developed at sufficient length and without undue stress and the application of methods is presented clearly and step by step in detail.

The book starts with a brief review of cost accounting in general and a comparison between historical costs and predetermined costs. It wastes no time on an extended introduction but plunges at once into practical matters including the development of the standard cost principle.

A major part of the book is designed around the description and use of three methods of standard costs entitled by the author Methods A, B, and C. Under Method A costs are charged to process at actual and credited at standard. Under Method B costs are charged at standard and credited at standard, and under Method C process is charged at actual and standard and credited at actual and standard. Method C involves the use of basic standard costs and the treatment accorded to it is more extensive than has appeared in any book except Mr. Eric Camman's "Basic Standard Costs."

Careful attention is devoted to the setting of physical standards, standard rates, and standard costs. Material is presented on the use of standard costs in the areas of sales and flexible budgets. Control aspects are considered throughout the book, including the analysis of variations and the preparation of reports for executives. Detailed cases drawn from experience and practice problems with solutions aid the student in mastering technique. By these means and through the care with which the book is written the author has made possible for those who put forth the proper effort a clear understanding of a difficult subject.

C. B. Nickerson

Harvard Graduate School of Business Administration

Business Mathematics. I. L. Miller. (New York: Van Nostrand Company, 1935, Pp. x, 376. $3.50.)

In the March, 1936 issue of the Accounting Review, I attempted to appraise Professor Williams's book *The Mathematical Theory of Finance.* Some of the remarks made then apply equally well to Professor Miller's book. Of the two books, the latter covers more ground. Professor Miller provides five introductory chapters constituting a quick survey of fundamentals of algebra, and furthermore presents chapters on exponents, binomial expansions, logarithms, quadratic equations, and progressions (Chapters VIII, X, XI) incorporated in the body of the text, rather than putting them in the appendix as Professor Williams did.

On the whole Professor Miller addresses himself to that considerable body of students of business who have had inadequate preparation in the high schools, and for their sake incorporates the above mentioned chapters in the text. Of the chapters devoted to the study of business mathematics several constitute a welcome addition to the field. Chapter VI covers the much neglected topic of percentages applied to trade discounts, chain discounts, and the conversion of percentages based on cost into those based on selling prices and vice versa.

Chapter VII presents the topic of simple interest (ordinary and exact), bank discount, time discount and the application of simple interest to many business situations including the equation of payments of accounts.

Chapter IX on Functions seems somewhat out of place in this book. This is not to deny the value of such a discussion, but no attempt has been made to integrate it with the rest of the text. It is a chapter more suited to a general mathematics course than one intended for business mathematics students. Some use could have been found for it, for instance, in showing the compound interest curve, and its relation to simple interest, particularly for periods of less than one year; graphic presentation may also be used for finding the basis price of bonds, etc.

The chapter on Progressions serves as a useful introduction to the subject of compound interest. In the compound interest chapter, the basic formulas are presented and well developed, and the equation of value is here taken up using compound interest.

The remaining chapters including annuities certain, sinking funds and amortization, valuation of bonds and depreciation, develop the subject along conventional lines. The problem of finding the interest rate of an annuity (p. 160) is solved by straight line interpolation in the annuity table; a similar problem, that of finding the investment or yield rate of a bond is found by the trial and error method. Since binomial expansions and quadratic equations are discussed in the book, it might have been well to show the method of approximating the yield by using the binomial expansion through the second power of the variable and then solving.

Professor Miller has devoted more space to the problems of life annuities and life insurance than any other author of a similar text. The subjects are introduced through a chapter on permutations, combinations, and probabilities. In addition to the usual topics, different formulas for calculating terminal reserves are shown, as well as special problems in connection with insurance.

Throughout the book, there may be found a wealth of good problem material. The tables in the back of the book might have been amplified. Thus logarithms of the various compound interest functions are very useful in lightening the work, and might have been included along with the natural functions. At least a six place logarithm table is desirable, in place of the five place table shown. For the calculation of life annuities, the American Annuitants Table of Mortality ought to have been included to lend a greater air of reality to the work.

On the whole, it should be said that the author has done a fine job in bringing the vast field of business mathematics within the compass of a text of manageable size, suitable for a single course in business mathematics.

THEODORE LANG

New York University

C. P. A. Law Questions and Answers. John C. Teevan. (New York: The Ronald Press Company, 1935, pp. ix, 256. $3.00.)

The questions discussed in this book are those of the Board of Examiners, American Institute of Accountants, examinations from 1925 to 1935, both inclusive. The same author prepared a book of answers, in 1925, covering the law examination questions of the Board of Examiners of the American Institute of Accountants covering the period of June 1917 to May 1925. This new text is an extension of the same work to include May 1935.

In addition to the answers of the law examination questions the author has an introduction which is intended to explain to the student the technique of analysis and solution of law questions. There are also an Appendix A, The Negotiable Instruments Law, Appendix B, Uniform Sales Act, and Appendix C, Uniform Partnership Act.

The answers given by the author are discussions of principles involved and are more than mere answers alone; they are well written and comparatively free of errors. As might well be expected, there is a tendency on the part of the Examiners to repeat themselves as time goes on. This, of course, calls for a repetition on the part of the author of his discussions.

In brief, the reviewer believes that the author has done a good job of discussing the problems; that the book is well adapted for a review of commercial law by applicants for the C. P. A. examination; and that it can be used, with profit, by all students of commercial law as a means of review. The work is not intended as a text and should not be adopted for that purpose. While the principles involved are well discussed, these principles do not occur in proper sequence nor in sufficient coverage to justify the use of the book as a text. It is, however, what it purports to be and is recommended for those purposes.

CHAS. N. HULVEY

University of Virginia

Cases on Business Law with Notes and Problems. Leslie J. Ayer and Paul P. Ashley; Revised Edition by the authors assisted by Stephen D. Brown. (New York: Prentice-Hall, Inc., 1935. Pp. xxx, 1291, $4.50.)

This is a revision of Cases on Business Law by Ayer and Ashley, printed originally in 1929. It is intended as a complete course in the study of business law, following the Case Method, with occasional use of footnotes, summaries, and some problems for discussion. The contents, briefly described, cover the following orthodox subjects:

Part I

Introduction—definition of law, written and unwritten; common law and equity, crime, torts, and contracts, contracted and pleading and practice. 31 pages.

Part II

Twelve chapters, 479 pages, covering the usual topics of contracts.

Part III

Sales. This is treated in six chapters covering 252 pages. The usual topics and arrangement are followed.

Part IV

Negotiable Instruments. This subject is handled in six chapters, a total of 272 pages of case material and authors' notes, as compared with a treatment covering 82 pages in the first edition. The authors say, concerning this Part: "The Section on Negotiable Instruments is a new book, complete in itself. The subject is now treated in a comprehensive rather than an abbreviated form. Because of the somewhat arbitrary and technical nature of the rules and the universal adoption of the Uniform Negotiable Instruments Act, it has seemed wise usually to set forth the various sections prior to the cases in which they are discussed."

Part V

Agency. Eight chapters, a total of 100 pages.

Part VI

Partnership. Six chapters, 72 pages.

Part VII

Corporations. Eight chapters, 99 pages.

Extracts of the Uniform Acts, viz., Sales Act, Partnership Act, and the Negotiable Instruments Law, are given from place to place as the authors think necessary, but there is no way, so far as the reviewer can ascertain, where reference can be had to the uniform acts as a whole.

The case book method of teaching business law is, of course, defended by the authors. The cases are somewhat "edited" so as to exclude extraneous subject matter. The benefits of this method are said by the authors to be an acquired ability by students to analyze cases and to apply the law to concrete problems; an almost unconscious knowledge acquired by the student of the background, theory, and spirit of our present

legal institutions. Latitude is left for the individuality of the teacher and full opportunity presented for class room analysis and discussion, both being essential to create interest and give vitality to the course.

It is difficult for a brief review to give an authoritative statement regarding the expertness of the selection of cases. The authors say that leading cases have been selected. The value of any case book is bound up in the selection of the cases. Individual teachers have their own opinions regarding the various methods of presenting the course to the students. There is much value in the case method provided the cases are well selected and are not too voluminous for proper analysis.

It is the reviewer's opinion that this new book is well worth consideration by teachers who wish a case book covering a rather comprehensive course in business law with students of maturity.

CHAS. N. HULVEY

University of Virginia

Corporation Law for Officers and Directors. William J. Grange (New York; The Ronald Press Company, 1935. Pp. xxx, 904. $6.)

The subtitle of this volume indicates that it will serve as a guide to correct legal procedure in corporate management. The author accomplishes effectively his stated purpose of giving those actively concerned with executive problems a manual of rules which comprise the law of corporations. Although the preface refers to the book as a successor to Conyngton's "Corporation Procedure," it attempts much less than that earlier work. Little attention is given to corporate accounting as such, and the author seldom goes beyond the legal issues to venture an appraisal of the particular financial practice as a part of company policy. This observation is merely to emphasize that the book is primarily a law book of the manual type in which officers or directors can readily get information on methods of procedure. The 200 pages containing 328 illustrative forms, from pre-incorporation agreements to a certificate of dissolution, should be especially helpful to officers of the smaller companies.

The 50 chapters comprising 674 pages of text may be divided into major groups as follows: twelve relate to incorporation, charter, and by-laws; twelve deal with capital, capital stock, and dividends; three consider corporate bonds and matters relating to issue and sale of securities; eight are given over to questions of corporate control with particular reference to rights and liability of stockholders; seven are concerned with directors and officers; and the last four chapters take up insolvency, bankruptcy, reorganization, and dissolution. A chapter on taxation of corporations gives emphasis to the growing importance and complexity of this problem. Two chapters also cover problems arising from operations in states other than the one of incorporation—problems to which managements must be alert as they push for nation-wide markets. A single chapter deals with the various methods of combination.

Due attention is given to the changes in corporate procedure brought about by the Securities Act, the Securities Exchange Act and the recent amendments to the Bankruptcy Act. In this area, however, this book contains nothing more than concise abstracts of the Acts themselves. With respect to this newer legislation, particularly, corporate managements must follow closely the developments of administrative law.

ROBERT L. MASSON

Harvard Graduate School of Business Administration

The Economics of Money, Credit and Banking: Second Edition, Revised and Enlarged. F. Cyril James. (New York: Ronald Press Company, 1935. Pp. xvii, 678. $4.00.)

The first edition of this well-known textbook appeared in 1930. The present edition contains approximately fifty per cent more pages than the earlier and represents a thorough-going revision as well as enlargement. Even the introductory chapters, dealing with the fundamentals of money, have been substantially altered and made more adequate. The revision includes a change as well in the order of treatment of the different topics. Thus in the 1930 text the whole discussion of money, including the treatment of its history and of its value, was compressed into the first 106 pages of the book. In the revised edition money is no longer treated as a prelude to banking. Money, credit and banking are instead regarded, as they properly should be in an economy in which banking creates the bulk of our media of payment, as interrelated aspects of a common subject. The discussion of the value of money, for example is accordingly deferred until after the explanation of banking. The treatment of the evolution of commercial banking, which in the earlier edition had preceded that of its nature, is now placed, with advantage, after the discussion of the nature of banking. And the materials dealing with the national banking system, formerly scattered in several chapters, have been brought together with a special chapter devoted to that subject.

In addition to the customary chapters common to our textbooks on money and banking, Professor James has introduced useful chapters on "Inter-Bank Relations," "Commercial Paper and Acceptance Dealers," "Commercial Credit Companies," and "Consumption Credit Institutions." On the other hand foreign banking systems receive only incidental mention and our own banking and monetary history are dismissed very briefly.

The author frankly emphasizes the broad principles that relate to the functioning of banking and currency, rather than the specific details of structure and legislation. Even the Federal Reserve system and the legislation of recent years are dealt with in little detail. In this respect the book will probably seem inadequate to many teachers, particularly those who devote a full year to the subject.

On the other hand the principles that underlie money, banking, and foreign exchange are dealt with at considerable length and in general in a way that should prove admirable for undergraduate instruction. The discussion of the value of money considers both

the traditional equation of exchange of Professor Fisher and the English approach of Keynes and others. The emphasis is primarily on the latter, and the discussion of the stabilization of the value of money runs largely in terms of Keynes' concepts. The views of Warren and Pearson are considered and also Professor Fisher's proposal that banks should keep 100 per cent of reserves against their deposits.

The doctrine of purchasing power parity is made the point of departure of the discussion of foreign exchange rates rather than the approach to the special case of inconvertible paper currencies, and the gold standard is then fitted into this framework of purchasing power parity. The final chapter, devoted to the problem of the monetary standard, comes to conclusions favorable to the return to the gold standard,—a gold standard, however, in which monetary management is to play a large part.

HARRY E. MILLER

Brown University

Fluctuations in American Business, 1790–1860. Arthur H. Cole and Walter B. Smith. (Cambridge: Harvard University Press, 1935. Pp. xix, 195. $5.00.)

"Fluctuations in American Business, 1790–1860" is study No. 50 in the Harvard Economic Studies and there is no question about its eligibility for that distinction. The volume consists of three sections, namely, Business Fluctuations, 1790–1820, 1820–1845, and 1843–1862. There are moreover appendices rich in factual data of unique value in addition to 129 tables and 48 charts. All of which is devoted to the rectification of "... two particularly grievous types of error." Of which one is the tendency of historians to treat of the down-turn of business after 1818, or the so-called panic of 1837, as the result of isolated inexplicable blows of fortune. The other involves the "... numerous inaccurate and unwarranted comparisons with disasters of more recent date." In addition to this objective, the authors have sought to make available a number of important time-series which reflect changes in American business conditions over the decades between 1790 and 1860. In achieving these ends the material has been drawn very largely from original sources. It is admitted at the start that "... the decline of most recent occurrence was not equaled in the past," but, it should be kept in mind that "No answer is proposed to the persisting puzzle of the genesis of business cycles in general. ..."

Section I is the work of Prof. Smith of Williams College. Its 33 pages relate to the period from 1790 to 1820 for which "The Economic Setting" is first given and then comes analysis of price statistics. A chapter each is devoted to commodity prices, to security prices, to domestic and foreign exchange and to banks and banking. There follows a chapter of general observations of which the first asserts that the starting point of business fluctuations in the United States from 1790 to 1820 appears to have risen mainly from changes in international trade, resulting from wars and the state of European crops. It is said that "... price indices constructed ... do not clearly warrant calling the years from 1790 to 1814 a rising phase of a long wave." Yet the author is quite reluctant to admit the presence of cycles, and this term is used only in quotations (p. 30).

Section II, "Business Fluctuations, 1820–45" is the work of Prof. Cole of Harvard. He finds considerable validity for the contention that 1820 "... marks the beginning of a new era in the economic evolution of the United States." The rising interest in the internal problems of the nation, the speculation in western lands, and the westward trend of population, the rise of inter-regional trade, the growth of banking and of government finance, the investment of foreign capital and the coming of immigrants are all woven skillfully into an introduction that reveals a firm grasp of the period. The statistical analysis includes a study of bank, insurance, canal and railroad stocks and the sales of public lands. There is also a most interesting analysis of commodity prices and the depression of 1843. Prof. Cole hesitates in characterizing the "... peculiar movement from 1834 to 1842 or 1843. ..." Was there a single crisis in 1837 or were there several from 1837 to 1841? There is also an interesting study of the contrast between agricultural and industrial prices and it is made evident that the "... rise and fall of British prices anticipate corresponding movements of American." This chapter, XI, undoubtedly constitutes a distinct contribution to the history of prices in this period. The following chapter considers "Changes in the Volume of Trade" and begins with a remarkable table. "Series of Infra-annual Data on the Volume of Trade, 1824–1845," together with "Series of Annual Data upon the Volume of Trade, 1815–45." Great amplitude in the fluctuations of our foreign commerce are revealed from the analysis of these series. There is an equally interesting analysis of fluctuations in domestic and foreign exchange rates in Chapter XIII with enlightening explanations of the movements. The relationship among the series used reveals that "... the course of stock-exchange values, as that of land sales ... anticipates with nearly uniform persistence the movement of commodity prices."

Prof. Cole's analysis of "Business Fluctuations, 1843–62" forms Part III. Here, as in the case of preceding parts, there is an excellent introduction. There follows a study of "Commodity Prices" in which the influence of international factors upon differences in industrial and agricultural prices is brought out. Reference should be made to the valuable analysis of the sustained movement of stock-market prices from 1843 to 1857. Then comes an excellent analysis of "Banking and Finance," Chapter XIX, including significant data on the influence of the gold discoveries. Incidentally, it is brought out that New York banks did not contract loans in a manner so rapid as to cause difficulties throughout the country following the failure of the Ohio Life Insurance and Trust Company in 1857.

It is impossible to do justice to this work in a brief review. The laborious searching for and finding of surprising sources, the careful development of series, the excellent judgment in the use of statistical method and with careful avoidance of excessive technique are some of the outstanding qualities of the volume. One must

add that, taken as a whole, the work of these authors has done much to correct erroneous impressions formed from the conclusions of others who lacked both the data and the technical equipment to use them. Moreover they must be credited with a treatise that goes far to fill in the aching voids that existed previously with respect to prices and price movements in this period. Subsequent studies of business history will find much of value in this work and studies previously made will be subject to certain significant corrections.

E. A. Kincaid

University of Virginia

Managing the People's Money. Joseph E. Goodbar. (New Haven: Yale University Press, 1935. Pp. xi, 578. $4.50.)

The author appears to be a lawyer with a deep interest in economic problems. His legal training appears to be exceptionally good, but he brings to this study little formal training in economics, although he does ". . . acknowledge the debt . . . to Prof. John H. Williams of Harvard." However, it is evident that Mr. Goodbar has done a vast amount of patient reflective thinking upon the literature which forms the background of this study and it should be added that his thinking has been straight. Out of it has come an exceedingly interesting treatise of seven chapters.

It is the purpose of the author to analyze, in a scientific spirit, the possibilities for management of money with a view to economic stability. In other words, he shares the view of Bernstein[1] that internal equilibrium should be the objective of monetary management, ". . . even at the expense of instability in the foreign exchanges." The analysis that follows is built upon Foster & Catchings' concept of the circuit velocity of money, as against the rejected concept of transaction velocity, and one of Keynes' Fundamental Equations, namely, that economic equilibrium depends upon the equality of current savings and current investment. It is contended that ". . . important fluctuations in the volume and/or velocity of the circuit flow of *money are disruptive to* price levels . . ." and, hence of economic equilibrium. It is also held that "Economic equilibrium depends upon maintaining equality between the volume of current savings and the volume of current investment." This equality cannot be maintained if bank credit is permitted to flow into the production of capital goods. Indeed, such a flow produces capital-goods inflation.

The remainder of the volume is devoted largely to the effect of the misuse of bank credit. Chapter II considers "Bank Credit and Wall Street." There it is pointed out that "The undistributed portion of these 'windfall profits,' plus idle corporate resources derived directly from the sale of new security issues financed by bank credit, constituted the source of much, if not all, of the 3,900 millions loaned 'on account of others' to brokerage firms on Wall Street." This telling blow follows upon the rejection of Hawtrey's contention that a speculative rise in stock prices does not require any accretion to the Financial Circulation" (p. 109).

Chapter III, "Banking Law in Action in the United States," is a most significant treatment of the various methods employed by national banks to abide by the letter of the law while violating its spirit. Thus, it is brought out that, "No really important movement of bank credit into real estate—took place until someone discovered the possibilities of financing real-estate developments by means of mortgage bonds." In this way the flow of bank credit into capital goods was further facilitated until they exceed economic needs and are unable to earn their fixed charges (p. 149). Mr. Goodbar continues this able analysis by discussing the lawful borrowing of more than the law allows one borrower, loans to bank directors and officers, the absence of birth control for banks, the amount of capital a bank must have, and branch banking. Each of these methods of evasion is examined with reference to its facilitation of the flow of bank credit into new investment, thereby bringing about inflation. It is held that "Bank loans on real estate, and on new means of production, had permitted the construction of new capital goods greatly in excess of the developed economic need" (p. 179) even though Dr. Nourse reached a contrary opinion.[2]

The author makes a careful analysis of the policy of the Bank of England in stabilizing monetary reserves, (Chapter IV) and here he finds support for the thesis of his entire volume, namely, that "The *occasion* for a period of feverish expansion may be political and/or economic. But it does not get out of hand unless credit expansion supplies the *means*." Eventually the Bank of England worked out a system of control that harmonizes with this thesis and its system was built upon the two principles, that bank credit must be substantially stable and it must not flow into existing or new capital goods" (p. 188).

Chapter V is devoted to the analyses of credit methods and policies of English joint-stock banks. Here the painful progress of English joint-stock banking away from unsound practices is clearly traced. It is made apparent that these banks reluctantly gave up the practice of diverting monetary flow from its proper channels in order to obtain wealth with ". . . little or no effort" (p. 288) and that, eventually, "English banking experience had ripened into a controlling tradition that loans for speculative purposes, and/or investment purposes, are disastrous for commercial banks. . . ." English banks learned to discriminate with respect to the purposes for which they loaned money, but American banks have not yet learned to do so.

Perhaps the most notable contribution of this work is found in Chapter VI, "Economic Defects in the Banking Act of 1933 and 1935." Here are 112 pages of penetrating analysis all of which centers about the failure of those acts to set up standards for the control of credit. In the course of the discussion it is made clear that no line can be successfully drawn between the "due use" of bank credit for speculation and the "undue use." The so-called principle of accommodating

[1] "Money and the Economic System." See Accounting Review, Mar. 1926, pp. 90–91.

[2] *America's Capacity to Produce*, p. 421.

the needs of commerce and business is also riddled. The inadequacy of these laws with respect to the flow of bank credit into investment through group banking and their failure to permit growth of branch banking in place of the menacing group banking are also developed. Federal deposit insurance comes in for severe but sound criticism, and the same may be said of the failure of these acts to reform the present system of required reserves against demand and time deposits. These criticisms are severe, but after all the acts do fail to provide "chart and compass" for control of credit and how, with a system under which any corner grocer may become a banker, can we hope for tradition in the place of statutory guides to credit control?

The final chapter, "Stable Economic Progress through Control over Bank Credit," begins with the admission that defective money and banking practices are not the only phenomena causing economic disturbances, but the latter are ". . . unable to develop very far unless aided and abetted by the improper use of bank credit. . . ." The other disturbing factors are not analyzed nor does the author consider the extent to which they may be responsible for errors in credit policy. In any event, the discussion passes to the structural changes that ought to be effected by statute and the policies of control that ought to be followed by the Board of Governors. The discussion then bears upon the control of the volume of credit and the control of the direction of credit flow. Mr. Goodbar feels that both must be controlled and that both have been ignored in the law and practice of banking in this country. This tendency does not appear to rest so much upon ignorance of fundamentals as it does upon a desire of capitalists to manipulate bank credit to their own ends even though they destroy capitalism in the process. While this is not the stated opinion of the author, it is the most underlying thought in his work. It is an able treatise and contains a vast amount of profound truth. One could wish for a more penetrating analysis of the foundations of the treatise, namely, the circuit flow of money and of Keynes' fundamental equation since so much of the subsequent discussion depends upon them, but granted the adequacy of the analysis of these, the remainder of the treatise must be accepted as to its major findings.

E. A. Kincaid

University of Virginia

Money—The Principles of Money and Their Exemplification in Outstanding Chapters of Monetary History. Edwin Walter Kemmerer. (New York: The Macmillan Company. 1935. Pp. xii, 406 $2.50.)

Dr. Kemmerer explains in his preface that "The plan of the book is, first, to explain the fundamental principles of money and bank credit; second, to show how these principles have been exemplified in certain chapters in the world's monetary and banking history; and, third, to apply the principles in the light of these experiences to our present-day monetary and banking problems." Happily, there is to be a companion volume, "dealing chiefly with banking and concluding with chapters on our present-day problems. . . ." Dr. Kemmerer has organized his work into four parts of which the first considers, "Elementary Facts and Principles," including a chapter on prices and the value of money and one on the quantity theory of money. In the former it is said ". . . that the burden of proof is certainly upon those who claim that money alone of all economic goods does not have its value determined by the law of demand and supply." This principle is then illustrated by "Cowrie Shell Money" and also by "India's Experience, 1893–1898," but there is no discussion of the distinctive sense in which the principle applies to money as contrasted with goods as is so ably set forth by Ellis.[1] As for the quantity theory, the brief statement of it stresses velocity and the author seems to be aware of recent theoretical contributions but it is not clear just how much they have influenced his thought. It is said that "Changes in the quantity of money in circulation require time to work out their influence on the price level, the principal buffers being V and R."

Part II contains three chapters on monetary standards, including monometallic and other standards, in which there is a discussion of the elasticity of the demand for gold, a subject usually slighted or ignored by writers on money. Part III is made up of two chapters, one on foreign exchange and one on the gold exchange standard. The former stresses the monetary forces in foreign trade and the latter presents the advantages and disadvantages of a standard whose ". . . future is in doubt." Part IV considers "Some significant Chapters in the World's Monetary History" of which the first relates to the French Assignats. Concerning the view of Hawtrey and Harris that the substantial increase in their value during The Terror was due in part to the depreciation in the value of gold and silver, Dr. Kemmerer holds that "Their arguments are not convincing." For a better brief treatment of the Assignats one would have to look far and the same may be said of the discussion of "The Paper Money Standard in England, 1797–1821." Referring to the Report of the Bullion Committee, Dr. Kemmerer remarks that ". . . many of the fallacies which Thornton so ably refuted are still held in high places." The discussion is enriched by inclusion of some of the more significant bits of testimony submitted by officers of the Bank of England.

There follows an exceptionally clear discussion of "The Greenbacks" in which the author, gratifyingly, includes an analysis of the Legal-Tender Cases. In the following chapter, "Germany's Experience With Inflation, 1914–1923," Dr. Kemmerer makes a brief but clear discussion of inflation especially with reference to velocities of circulation, time lags of various series, and the impact of inflation upon various classes. Thus, the ". . . entire mortgage indebtedness of the German people . . . approximately 40 million marks in 1913, could have been paid off in November, 1923, with one American cent." Again, surprisingly, the slow rate of the advance in the price of stocks as compared with commodity prices and wages is explained. Finally, inflation got completely out of control because of ". . . the

[1] *German Monetary Theory*, 1905–33, Ch. IV.

extravagant expenditures by the government of funds borrowed from the Reichsbank for maintaining 'passive resistance' in the Ruhr."

"French and American Bimetallism" is the subject of Chapter XIV. France ". . . gave bimetallism the longest and probably the fairest trial which it ever had," and the controversy in this country drew largely upon French experience. Attention is called to the application by France, and the other states of the Latin Union, of the compensatory principle as a means of maintaining the parity of the mint and market ratios. In the first period of bimetallism in this country, 1792–1834, when gold was undervalued at the mint ". . . the evidence . . . seems to be stronger for the claim that gold did not leave the country in any considerable quantities until about the time of the great increase in the foreign demand for gold accompanying England's return to specie payments." In any event there was little gold in the country between 1821 and 1833, but the Coinage Act of 1834 with its ratio of 15.625 to 1, mysteriously changed to 16.002 to 1, in its course through Congress, overvalued gold at the mint and reversed the situation. Thus, Dr. Kemmerer is led to say that "We never gave bimetallism a fair chance."

In the final chapter (XV) is brought out that, in the 186 years from 1687 to 1872 the range between the high and the low ratio between gold and silver was only 15 per cent, while the variation from 1873 to 1898 was about 120 per cent. In these latter years there was a decline ". . . in the gold price of silver . . . chiefly an expression of an appreciation of gold, not a depreciation of silver." This situation led to the agitation for the restoration of bimetallism, the arguments for and against which are clearly presented, and the consequent enactment of the Bland-Allison Act and the Sherman Purchase Act. The value of the discussion of the former act is enhanced by a statement of just how it worked. The volume ends with a brief discussion of the adoption of the gold standard in 1900.

Dr. Kemmerer has consulted the leading treatises on the various phases of the several subjects discussed by him and there is a good working bibliography at the close of each chapter. But he has quite often included material of his own production and it is evident that the views set forth are his own mature reflections rather than a reproduction of the best thought of other writers. The lessons to be learned from the world's experience are clearly brought out but no effort is made to stress their present significance for students of monetary economics or for statesmen in this or any other country. The pedagogical result is not all that could be desired.

It is fortunate that the author plans a companion volume on banking, ". . . concluding with chapters on our present-day problems," if this indicates the inclusion, among other things, of discussion on the working of the gold standard before and since the war. Clearly the absence of analysis of this latter subject is the chief deficiency of the present volume both as a dispassionate treatise and as a text. The second volume may be so developed as to provide, in two volumes, excellent textual material for classes in money and banking and it is to be hoped that this will be the outcome for the present volume does not sufficiently indicate the attitude of Dr. Kemmerer towards the contributions of such monetary economists as Robertson, Hawtrey, Cassell and Keynes.

E. A. Kincaid

University of Virginia

100% Money. Irving Fisher. (New York: The Adelphi Company. 1935. Pp. xx, 212. $2.50.)

The author's preface contains acknowledgements to bankers who approve the 100% principle and also to several economists including ". . . members of a group at the University of Chicago from whose 'memorandum' on the 100% plan I originally obtained many ideas embodied in this book." Professor Fisher also explains that he has ". . . tried everywhere to stress only the principles involved rather than to insist on the exact methods for applying them." And the real principle involved ". . . is to make money independent of loans; that is, to divorce money from banking." There follows a brief "Foreword" by Mr. Robert H. Hemphill, a practical banker, in which he advances the view that we have insufficient money to effect the exchanges.

In his introduction, Professor Fisher maintains that the increase from 26 to 27 billions in the total circulating medium from 1926 to 1929 was inflation and the decrease from 27 to 20 billions from 1929 to 1933 was deflation. From this it seems to follow that ". . . our national circulating medium is now at the mercy of loan transactions of banks . . ." quite regardless of the liquidity of bank loans. It is, therefore, proposed that the ". . . Government through an especially created 'Currency Commission,' *turn into cash* enough of the assets of every commercial bank to increase cash reserves of each bank to 100% of its checking deposits." But Professor Fisher cannot resist the temptation to inject into the discussion of the 100% plan the idea of maintaining a stable price level, although he does point out that ". . . either could, conceivably, exist without the other."

Chapter II contains an "Outline For a Statute" and then the discussion passes to Part II, "How the 100% System Would Work." Here it is brought out that when banks lend money against a fractional reserve, they have, in effect, manufactured money. In other words, by this means banks inflate the circulating medium (p. 35). "The smallness of the reserve . . . and . . . the connection between checking deposits and loans, constitute the great defects in our present banking system." Accordingly, reformation of the Federal Reserve by regulating the kinds of loans fails to meet the issue. Recognition of this and other defects explains ". . . the quest for non-dependence of money on loans." Indeed, ". . . the quest for non-dependence of money on loans was what started the present writer on the 100% system."

Professor Fisher would have each commercial bank split into a "Check Bank or Department and a Loan—and—Investment Bank or Department" whereby the use of deposit currency resulting from loans would become impossible and by the same token inflation and deflation (p. 65) would also become impossible. Chapter VII brings in the substance of the ideas advanced in

Professor Fisher's "Booms and Depressions" that over-indebtedness especially in the form of bank loans and deflation (or appreciation of the dollar) were the two economic maladies of chief importance in great booms and depressions (p. 107). Reference is also made to the great paradox,—"The more debtors pay, the more they still owe" and it is made obvious that the debts are, for the most part, short-term, demand and call, bank debts, made possible by the 10% system. The liquidation of debts increased the purchasing power of the dollar and lowered real incomes at a greater rate than the rate of liquidation.

The trouble starts with a rate of profit in excess of the rate of interest, for this leads to over-borrowing. In other words, a condition of inflation brings on more inflation. If Prof. Fisher had also brought out the fact that this could happen only when banks lend in excess of their deposits or against value that does not emerge then he would have also made it obvious that not even a 100% system can maintain stability, for under his plan there are savings deposits with which to deal. However, he admits that the 100% system would not do away with booms and depressions although it would mitigate them. It becomes apparent as one reads this little book that Prof. Fisher would create a knave-proof and a fool-proof system, since with 100% reserves there could be no dependence upon the soundness of the banker's judgment as to the certainty or the degree of the emergence of value.

In view of the risks inherent in the 10% system, the compounding of errors in judging the degree and certainty of emergence of value against which the banker lends, Prof. Fisher is disposed to think that branch banking with diversification of assets would be desirable in the absence of the 100% system. And he expects the opposition of bankers to the 100% idea, because they ". . . do not realize the fools paradise in which they are now living because of the 10% system." Apparently, he considers banking under the latter a sort of lottery because the very system multiplies the chance of error on the part of the banker and also multiplies the consequences of the error. The remedy is to prevent bankers from creating demand deposits, i.e., from acting as mints, and this can be done through the 100% system. Seemingly, there is no chance that bankers can be expected to become sufficiently expert in judging values to be trusted with banking functions under the 10% system. Indeed, can banking be sound so long as money is based upon debts?

Prof. Fisher would leave to bankers, under the 100% system, the guidance of the flow ". . . of capital into the most promising channels of investment," but this function would seem no more safe in the hands of bankers than the creation of deposits subject to check, for the problem of emergence of value is here even more difficult. After all, one is compelled to consider the possibility that Prof. Fisher's Currency Commission may make some errors with respect to fluctuations in the national income. Is it to be more dependable than the general run of bankers? This Commission must deal with the emergence of value in the aggregate and one wonders whether it will be more competent to deal with such an abstract matter, when the banker on the ground makes errors even though he is dealing with specific instances, at specific places and under conditions known to him. It seems impossible to share Prof. Fisher's optimism, though one may readily approve of the criticisms of the existing 10% system and feel grateful to him for the competence with which he dissects it.

E. A. KINCAID

University of Virginia

Organization and Management of a Business Enterprise. Karl D. Ferstrom, Robert F. Elder, Wyman P. Fiske, Albert A. Schaefer, and B. Alden Thresher. (New York: Harper & Brothers, 1936, Pp. xi, 703. $3.50.)

This volume gives the student "a comprehensive view of the nature and problems of business management with special reference to their interrelationships" in the fields of "corporate organization, finance, accounting, production, marketing and the legal principles applicable thereto." It serves as the text in the course entitled Introduction to Business Management given by the five authors at the Massachusetts Institute of Technology.

It is one of the very few general texts for non-Commerce students which appeal to me. It is exceptionally well done. The authors certainly accomplish their purpose of showing the relationship of the several fields of business, and yet they do not attempt to tell their students that they are giving them all that it is necessary for an engineer to know in each of the several fields. The function or use of accounting, for example, is well handled and our own member Professor Fiske (I assume) is to be congratulated on his contributions to at least the following interesting chapters:

Organization for Fact Finding
The Master Plan and the Budget
Factory Cost Analysis
Expense Control
Financial Statements

Perhaps he contributed to other chapters also. The point I particularly want to make is that a student having used this text should be anxious to take specific courses in those fields which have particularly interested him. The authors do not say that they are teaching all the accounting which it is necessary to know, or that they are giving a short course in Commerce which makes the rest of the Commerce curriculum unnecessary.

The approach to the subject and the treatment of the several divisions appeal to me, and I believe accounting instructors could read it with profit. To illustrate, the review of the text gave me several new ideas for my course in Accounting Systems.

F. H. ELWELL

University of Wisconsin

Social Security in the United States. Paul H. Douglas. (New York: McGraw-Hill Book Company, Inc., Whittlesey House, 1936, Pp. xi, 385. $3.00.)

Professor Douglas' latest volume in the field of social insurance is less comprehensive than the title leads one to assume. This volume is mainly devoted to the task

of explaining and analyzing the recently enacted Federal Social Security Act. The first section introduces the subject by tracing, in very brief form, the developments in the field of unemployment and old-age insurance prior to 1934. These earlier statutes were all enacted by states, they were relatively inadequate, there was no Federal supervision or financial aid involved. The result was a patchwork assemblage of different systems.

The Federal Social Security Act was the work of the present administration. This act was preceded by the Dill-Connery and Wagner-Lewis bills, and was the indirect result of President Roosevelt's action in appointing a Committee on Economic Security. This Committee was appointed to study the question of social insurance and to report to Congress in January, 1935.

Once the Committee on Economic Security was formed, extensive hearings were held and attempts were made to work out the two fundamental questions. These questions were, "(1) what should be the relationship of the national government to the plan? . . . (2) from the financial point of view, how costly a system should be introduced and how should these costs be distributed?" The main efforts of the Committee seem to have centered around the attempt to decide whether the "offset" method or the "block grant" method should be employed. The "offset" method was to allow credit on Federal assessments for payments made to state insurance systems. The "block grant" method was, in effect, a Federal subsidy, or a system of unmatched grants to the states which would pay substantially the full cost of the state insurance systems. The final decision was in favor of "block grants." However, the officials of the Department of Labor favored the "offset" method which was the method embodied in the Wagner-Lewis bill. The "offset" system of payments was included in the bill presented to Congress.

The enactment of the Federal Social Security Act, in the opinion of the author, was indirectly helped along by the sudden rise in popularity of the Townsend plan and of the Lundeen Bill for Unemployment Insurance. The popularity of these plans, plus the need for state action, caused the friends of the insurance bill to attempt to hurry the insurance question before Congress. However, the Committee's report was not made until January 15, and a bill embodying some of the features of this report was introduced on the seventeenth, supported by Senator Wagner and Representatives Lewis and Doughton. The passage of this bill through the two chambers, the different provisions suggested, and compromises resulting, are excellently treated in this volume.

The second part of Professor Douglas' work deals with the bill as finally passed by Congress and signed by President Roosevelt. The separate parts of the bill, such as the provisions for unemployment insurance, old-age insurance, and welfare purposes are analyzed and explained. The provisions of the Act relating to administration are emphasized with particular treatment given of the problem of state administration.

The success of the Federal Social Security Act will depend, in large part, on the actions of the various states. Only old-age insurance is to be administered directly by the national government, and state action is necessary before most of the other features of the Act can become operative. The fact that the Act was not passed in time for many state legislatures to consider the question of state action means that, for many of the states, nothing definite can be done before 1937.

By July, 1935, 31 states and 2 territories had mandatory old age insurance provisions. Four states had optional laws. Some of these laws will need to be changed to conform to the wishes of the Social Security Board, the optional laws will need to be made mandatory, and the states without any laws will need to pass mandatory acts before the Act can become fully operative. Further changes, in the opinion of Professor Douglas must be made if some of the present state laws are to be effective. He specifically points out the need for reducing residence requirements, of increasing the scale of benefits, of reducing the age of eligibility, of removing or changing the property test, and of financing along progressive rather than regressive lines.

The last part of this volume deals with certain questions such as the constitutionality of the Act, and puts forward certain opinions regarding needed changes in the Act.

"Social Security in the United States" is an able explanation of the need for social insurance and of the present legislation. The explanation and analysis is mainly devoted to making clear the various provisions and the methods of administration. There is little attention paid to economic questions which will result from the operations of this Act. The question of the incidence of the taxes which finance the Act, for example, is not treated in any detail. Neither is the use of the funds which will be accumulated under the old-age pension plan treated adequately. It is estimated that the funds accumulated under this section of the Act will, by 1980, amount to approximately 47 billion dollars. The question of the disposition of this fund and its influence on the business cycle will be very important. However, Professor Douglas states in his preface that he has attempted "to explain what the Federal Social Security Act provides, . . . to trace the steps by which it came into being and to outline some of the problems in the field of social security. . . ." All of these aims are excellently carried out.

F. P. Smith

University of Rochester

Speculation and Gambling. Ernest D. MacDougall. (Boston: The Stratford Company, 1936. Pp. xi, 252. $2.00.)

The thesis of this book is that all gambling is bad. Speculation, as the term is commonly understood, is in reality merely another word for gambling. The usual distinction between gambling and speculation, as embodied in our economic literature, is discarded and new criteria are chosen.

A person speculates when he "makes a risky purchase." One gambles when he "bets on the fluctuation of price." The element of risk, according to the author, has nothing to do with the distinction between gambling and speculation. All gambling is "betting" while the practices of investing and speculating involve buying and selling. The risk inherent in speculation is larger

than the risk inherent in investment but is common to both. The risk element in gambling arises from the practice of betting on the fluctuations in price.

Bucketshops, brokers' offices and stock exchanges come in for their blasts of contempt and ridicule. "A large portion of the business conducted in stock brokers' offices consists in gambling, pure and simple." The position in this matter is that most of the buying and selling through brokerage firms and exchanges is, in fact, mere betting on the price fluctuations and is no different from the business of bucketshops. Margin buying and short selling are merely conveniences for the gambler, have no economic justification, and are important aids in the "bucketting" operations of the brokers and exchanges.

The grain markets are classified into "cash" and "futures." Cash markets provide facilities for buyers and sellers but the futures markets provide facilities for gambling. A list of court decisions is quoted to prove this point and a few statistics are introduced to show the small volume of grain which is actually delivered through the futures market.

It is to be expected that the college professor should come in for his share of blame. "It is amazing how impractical some of our leading professors of economics can be. They talk learnedly of production and distribution of wealth; of income in the form of wages, rent, interest and profit. Yet the largest income of all they seem to forget—the proceeds of crime, including gambling."

The results of gambling can, perhaps, be summed up in the following quotation: "Gambling does make a man forget himself. He worships Lady Luck, seeks out risks upon which to bet, stultifies and subverts his mind. And then he proceeds to embezzle, to steal, to swindle, to kidnap, to kill, and finally, to commit suicide. Supreme virtue this, indeed!"

It must be admitted in defense of this volume that occasionally the author slips in an admission that perhaps a very small proportion of trading on stock exchanges and "futures" exchanges is "legitimate" and has some economic justification. However, these admissions are hurried over and dropped as quickly as possible.

A long and imposing array of quotations is included on the subject of speculation and gambling. The book opens with quotations from Shakespeare and Abraham Lincoln, runs through a long list of writers on betting, cites the church, most of the encyclopedias, a varied assortment of court decisions, and is brought up-to-date with mention of Bruno Hauptmann and quotations from President Roosevelt.

"Speculation and Gambling" is an interesting volume, provided one wants a collection of definitions. There are some interesting statistics on grain trading taken from secondary sources. The tone of the book may be judged from the following quotation: "The time has come for red-blooded, liberty-loving, independent American men and women to quit acting as cowardly mollycoddles, pussyfooting away from the threatening power of predatory plutocracy, and to begin to call a spade a spade, to cease fearfully to tone down plain, truthful speech and sound doctrine, and to stop tickling itchy ears of covetous criminals while vast multitudes of the people are hungry and sick." The author states in his preface that gambling "... is one field of human activity which has not, as yet, been explored by scientific research." This condition has not been altered by the publication of "Speculation and Gambling."

F. P. Smith

University of Rochester

World Finance, 1914–1935. Paul Einzig. (New York: The Adelphi Company, 1935. Pp. xvi, 382. $3.00.)

This volume deals with world finance from the outbreak of the War to 1934, the "... year that the process of deflation ... came to an end." In the course of these years Mr. Einzig has written a number of volumes on financial subjects in which he has advanced views that he has since modified. It would appear that he formerly held the classical economic doctrines in unwarranted esteem for he finds that "... under the influences of the lessons of the last five years he has moved distinctly further from the classical doctrines of the Nineteenth Century." Moreover, he disagrees "... entirely with those who think that everything ought to be sacrificed for the sake of maintaining the monetary *status quo.*"

Mr. Einzig ascribes most of our troubles prevailing these last fifteen years to the initial mistake committed by post-war statesmen in 1920, "... when they resorted to the high bank rates and credit restriction in order to check the commercial boom notwithstanding the fact that the rise in commodity prices was the natural process of readjustment brought about by the increase of fictitious wealth during the war." Indeed, he stresses two points, to wit, the increase of fictitious wealth and the impossibility of producing satisfactory results through monetary policy unless it is also accompanied by economic planning. It should be added that he also stresses another without calling attention to it, for he seemingly delights in taking repeated flings at the economists of the Classical School and their "rigid dogmatism." This latter tendency is rather unfortunate since it is not well supported and therefore appears superficial.

Chapter II attempts to answer the question, "What is Inflation?", but Mr. Einzig's final position is rather vague. He sees the possibility of inflation in an increase of purchasing power depending upon the degree to which "... The public spends its earnings." It is admitted that the ratio between spending and saving fluctuates widely, but his observations are not embodied in a formal definition. In subsequent discussion Mr. Einzig admits that "... some evil consequences are unavoidably connected with inflation," but the extent of these depends upon the circumstances under which inflation takes place. He is disposed to believe that it is "... possible to increase the production of goods by creating fictitious purchasing power." It seems, then, that forced saving will not produce disequilibrium! In any event, "... it is to the credit of war-time inflation that the rigid orthodoxy of the world's financial conception was broken.", thereby making room for the Einzigian view that the deflation of 1920 reversed the

tendency to restore a normal ratio between fictitious wealth and real wealth, thus bringing about the disequilibrium that has increased ever since.

Mr. Einzig devotes Chapter IX to examples of extreme inflation and he points out in the following chapter that, "When orthodox economists talk about inflation they take good care to quote exclusively . . ." such examples. There is, he believes, a case to be made for limited inflation because in the past it has taken place under unstable conditions, as if there could be any other under which it could take place. Then, too, he feels that it has taken place in a haphazard manner. Passing to War Debts he holds that, with a rising trend of commodity prices and devaluation of the dollar, ". . . European debtors would have found no difficulty in discharging their liabilities." The trouble came from the rise in the commodity value of the international debts.

Part II is devoted to "Stabilization" by which he appears to mean stabilization of commodity prices as contrasted with stable exchanges and mint parities and, in addition, ". . . approximate equilibrium between the amount of fictitious wealth and real wealth." America contributed much to instability by sterilizing gold and Mr. Einzig believes that ". . . it would have been to the interest of the United States to inflate and to devalue the dollar after the war instead of deflating and then forcing the world into a deflation . . ." thereby involving us eventually in a grave economic crisis (p. 119). Of course this in turn contributed to the scarcity of gold, a situation discussed in Chapter XVII, "The 'Gold Rush' " wherein he refers to Prof. Kemmerer's "stereotyped advice to every country between China and Peru" that they should establish the gold standard (p. 141). In this way Prof. Kemmerer contributed to the increased demand for gold which, in the face of the ". . . inadequate amount of the world's monetary stock . . .," was directly responsible for the crisis.

The author associates himself with that school of thought which holds that the ". . . maldistribution (of gold) was artificially maintained by the United States and France. . ." rather than with the school which holds that Great Britain should have deflated and thus attracted gold (p. 164). Since the fundamental difficulty was in the shortage of world's gold supply, the solution could not be found in deflation of prices into equibrium with the gold supply for that would only increase the disequilibrium between real wealth and fictitious wealth. In other words devaluation was the solution. In the absence of proof of the gold shortage the position is plausible. Resistance to devaluation was a major factor in the crisis of 1931, still Mr. Einzig is disposed to admit that economic forces would have produced a crisis even if monetary factors had been eliminated.

Part III deals with "Deflation" and here the author holds that "President Roosevelt is entitled to claim full credit for any improvement within and outside the United States since his advent." He devalued the dollar, therefore "It is impossible to deny his immense merits in breaking the international deadlock. . . ." (p. 253). This praise results from the President's efforts to establish equilibrium between real and fictitious wealth by devaluation route. Part IV considers "Reflation." It is defined as ". . . an inflationary movement tending to reverse a deflationary movement that has preceded it." He seems to go so far as to maintain that reflation is a remedy for deflation (p. 305). In any event some reflation came about in Great Britain, but it was chiefly the result of the ". . . rise in commodity prices in the United States . . ." and the latter, presumably was due to reflation. While no evidence is submitted on this point, this does not deter him from holding that devaluation of the dollar has not gone far enough (p. 318). Finally, Mr. Einzig feels compelled to take the position that no monetary policy under laissez faire can produce satisfactory results in the changed position created by the war.

There is a total absence of documentation, bibliography and supporting data. The author assumes that he is dealing with recognized truths which need no support, especially from economists tainted with classical doctrines. Allowing for these deficiencies it may be said that Mr. Einzig has written a highly interesting and useful analysis of financial events since 1914, especially for the general reader who is not annoyed by the absence of supporting facts and careful reasoning, and who has not been influenced by any of the older economic disciplines no matter how profound their contributions to economic knowledge.

E. A. KINCAID

University of Virginia

The Distribution of Wealth. A Factual Survey Based upon Federal Estate Tax Returns. William Leonard Crum. (Boston: Harvard University Bureau of Business Research, 1936. Pp. iii, 24. $.50.)

This report, issued through the Division of Business Research of the Harvard Graduate School of Business Administration is based upon the data supplied by the Federal Estate Tax Returns for the years from 1916–1933. It is unquestionably a valuable contribution as well as a valiant attempt towards the problem of wealth distribution as distinguished from income distribution. One interested in pursuing the subject of wealth distribution soon encounters a blank wall. Thus, Carver's book *The Distribution of Wealth* devotes considerable space to the forms of income flowing from wealth, namely, wages, rent, interests, profits. It is a strictly theoretical discussion, and sheds no light as to the quantitative distribution of our national resources. The same is true of J. B. Clark's book bearing the same title. The *Encyclopedia of Social Sciences* is singularly silent on this important topic. But on the subject of income distribution, a number of important contributions have been made, both from the point of view of theory and quantitative study.

Irving Fisher's definition of capital may well serve as a starting point for our discussion. According to him, capital is a stock of wealth existing at an instant of time, as distinguished from income, which is a flow of services through a period of time (Fisher, *The Nature of Capital and Income*). For statistical purposes, however, as Prof. Crum points out, this must be modified by defining wealth in terms of "property rights with all

the peculiar perplexities incident to their valuation," (p. 1).

In making this study, Prof. Crum has pretty well exhausted the possibilities of the material before him and has studied wealth distribution from the point of view of

(1) Size of estates
(2) Variation in time
(3) Differences by sex, marital status, and age
(4) Differences by vocation
(5) Differences by forms of property

Two questions immediately arise: first, as to the adequacy of the sample, and second, as to the type of mathematical analysis followed. As to the first, the data pertain for the most part not to men in active life, but to men of advanced years or actually expecting death. Moreover, only the wealthier members of the community are covered, since net estates below $50,000 and in some years below $100,000 are not subject to tax. Thus the lower range of the size distribution is excluded and hence limits the available sample. Admittedly then, it is not a random sample; neither can it be said to be an adequate sample, because of the comparatively small number of returns, for the population as a whole. But within the limits mentioned, the findings may well be valid as bearing upon the problem of wealth distribution among the wealthy.

The major portion of the study deals with inequality in the distribution of wealth, based upon a form of analysis suggested by Pareto. In the formulation of Pareto's well known law, the latter was concerned primarily with distribution of incomes, but Prof. Crum with full realization of its shortcomings nevertheless uses Pareto's mathematical analysis for studying the distribution of wealth. The law is stated in various forms, but in its most dogmatic form states that the distribution of incomes in the upper (income tax) brackets follows a straight line equation represented by

$$\log y = \log b + m \log x$$
$$\text{or } y = bx^m$$

where x = income size
and y = number of persons having that income or larger,

and b and m are constants to be found from empirical statistics.

"The technique, therefore, is simple: the given frequencies are cumulated from high values of the variable to the low; the cumulative frequencies are plotted as ordinates and the values of the variable as abscissas on a double log scale," (p. 23).

Pareto also fitted a least square straight line to his data and observed that the slope "m" of the straight line was 1.5 (neglecting the minus sign) in all countries and at all recent times; hence, extrapolation of the line into the area to the "left of that covered by the plotted points gave estimates of the distribution of small incomes, and suggested a generality in the law for all income classes" (p. 23).

The curve for the estate tax data shows remarkable rectilinearity, especially when the net estates are adjusted through the addition of a constant in the form of the specific exemption allowed under the law. Although the gross estate cannot be inferred from the given data, yet the addition of the exemption is somewhat nearer to it than the net taxable estate.

In Pareto's analysis, the inclination of the fitted straight line was defined as the coefficient of inequality, "and he regarded a decrease in the slope as reflecting a decrease of inequality" (p. 5). This is evidently erroneous, for a decrease in slope obviously represents an increase in the inequality of the distribution. Prof. Crum therefore uses the reciprocal of the slope as a measure of the inequality, "so that increases in the resulting index will reflect increases in inequality" (p. 5). Thus, inequality is relative, since "it expresses a *percentage* change in wealth per individual corresponding to a given percentage change in the number of individuals" (p. 5).

Without attempting a detailed analysis of Prof. Crum's material, the following tentative conclusions may be drawn:

1. The inequality in the distribution of wealth varies with the business cycle, though with a substantial lag, being greater following a period of prosperity than after a period of depression.

2. Wealth is more evenly distributed among married men than among single men, but among women the reverse is true, the inequality in distribution being greater among married women than among single women. These four groups of persons may be arranged according to the degree of inequality as follows: married women, single men, married men, single women.

3. Wealth is most nearly uniformly distributed among people of middle age, while inequality is higher among younger people, and is still higher among older people.

4. As to vocations, the highest inequality is found among corporation officials, with a slightly lower inequality among manufacturers, while wealth is more evenly distributed among agriculturalists and merchants.

A separate section treats at length of the various forms of property held. The differences in the relative holdings of real estate, stocks, and specified sorts of bonds show changes over time and variations among estates of different sizes, as follows:

1. The period 1922–1933 shows increased average holdings in tax-exempt securities.

2. The rate of growth of holdings in tax-exempt bonds was greatest for moderate-size estates.

3. While the very large estates represented predominantly holdings of corporation stocks, real estate constituted the major portion of small estates.

4. Larger estates were most responsive to price changes owing chiefly to their preponderant holdings of securities, especially stocks.

With all the limitations above mentioned, the data none the less shed much light on the distribution of wealth for the particular sample, and it is to be hoped that when further data are available, Prof. Crum or other investigators will be eager to attack the problem afresh.

Theodore Lang

New York University

Retail Merchandise Accounting. Hermon F. Bell. (New York: The Ronald Press Company, 1936. Pp. 276. $5.00.)

In a single compact volume Mr. Bell, for many years associated with Lybrand, Ross Bros. & Montgomery, has presented a thoroughly useful outline of the objectives and procedures of retail merchandise accounting, or more exactly, of department store merchandise accounting. The book does not cover as wide a scope as its title implies since little attention is given to procedures not primarily in use in department stores. While it is true that department stores are a highly important element in the retail structure, no survey of *retail* merchandise accounting is complete without some attention to such methods as the "standard unit" tabulating machine system of the large grocery chains, the thoroughly mechanized merchandise control systems of the shoe chains, and the many modifications of the retail method of inventory which variety chains have adopted.

In dealing with department store merchandise accounting, Mr. Bell covers a great deal of territory. After pointing out the distinctive features of retailing, which influence accounting procedures, as compared with manufacturing or wholesaling, and after presenting definitions of various terms, he outlines briefly the several methods of merchandise control and devotes a chapter to merchandise budgeting. It is rather surprising to find, however, that this chapter contains no reference to unit planning or budgeting, since many progressive stores find such practices of even greater practical value than dollar planning.

The following four chapters contain a discussion of inventory dollar control, particularly the retail inventory method. In connection with his useful description of the retail method, Mr. Bell uses the phrase "inventory at mercantile" as a substitute for "inventory at cost or market." The present reviewer applauds this suggestion heartily since the inventory value computed under the retail method is not "at market" according to the usual meaning of the term.

In his four brief chapters Mr. Bell touches on some of the troublesome practical problems of operating under the retail method, but there are many others. The few questions which follow are typical of those which bother controllers:

(1) How should transfers of merchandise from one department to another be handled when mark-downs are involved?

(2) What is proper accounting for merchandise acquired over a period of months for a special sale, e.g. a February furniture sale?

(3) How can pressure from merchandising executives to treat mark-downs taken to meet competitive prices such as mark-up cancellations be resisted?

(4) What is the sound procedure for recording price changes (i.e. mark-downs or mark-up cancellations) in such departments as women's hosiery with their frequent special sales of regular stock purely for promotional purposes?

(5) What is the effect on inventory valuation of permitting workroom costs to be considered as part of selling department merchandise costs without a retail offset?

To accomplish his task within reasonable space limitations, Mr. Bell clearly could do no more than discuss the major problems. But the retail method has been under severe pressure during the depression, particularly at its most vulnerable point, the recording of mark-downs, because of the desire of buyers and merchandising executives to minimize the unsatisfactory results. There is need, in the writer's opinion, of a complete and thorough restatement of the retail method with attention being devoted to all the problems encountered in actual operation. Such a handbook on the retail method might well require five times as much space as Mr. Bell was able to accord to the subject.

A particularly significant section of Mr. Bell's discussion of the retail method is a statement of the need for inventory reserves. Theoretically, the recording of mark-downs when taken automatically results in a sufficient reduction in the value of the inventory. But if mark-downs ultimately will be necessary to move a lot of merchandise and, for one reason or another, have not been taken at the time of closing the books, a conservative valuation of the inventory will not be secured. The overstatement of inventory values from this cause might attain sizeable proportions in a period of rapidly declining prices. Mr. Bell outlines several bases for setting up reserves to offset this tendency.

The remaining chapters deal with the following topics: Mathematics of Retail Merchandise Accounting; Unit Stock Controls and Related Procedures; Taking of Physical Inventories; Control of Merchandise Orders and Invoices and of Receiving and Marking; Determination of Departmental Sales; Statements Reporting Merchandise Operations; Elements of Merchandise Profit and Cost of Sales; Allocation of Expenses to Departments; Workrooms; Leased Departments; Some Tax Problems and Procedures of Retail Merchandise Accounting. Some of these chapters are extremely brief in relation to the problems involved, notably those on the control of merchandise orders and invoices, of receiving and marking, of unit stock controls, and of the allocation of expenses to departments. On the other hand, the last three chapters are extremely helpful discussions of topics usually given altogether too little attention.

Viewing the book as a whole, one may say that its major virtue is the cause of its major fault. The volume will be useful primarily because it brings together in one place a description of all the important phases of merchandise accounting. The major fault is that in many instances Mr. Bell had space only to state what should be done and not how to do it.

Stanley F. Teele

Harvard Graduate School of Business Administration

UNIVERSITY NOTES

Antioch College

Perry Mason, professor of accounting, has been granted a year's leave which will be spent as Lecturer in Accounting at the University of California at Los Angeles.

University of Colorado

Mr. Charles Rovetta, instructor in accounting, will be on leave of absence during the coming year, in order to pursue graduate work at the University of Chicago. He will also assist in teaching accounting at the same institution.

A more complete offering of accounting courses will be made available in the 1936 summer session. Undergraduate courses will be offered in Accounting Principles, Accounting Procedure, Intermediate Accounting, Cost Accounting, C. P. A. Problems, Auditing, Advanced Accounting Theory, Budgets and Accounting Control, Income Tax, Accounting Systems, and in Accounting and Budgetary Practice in Secondary School Systems.

The Accountancy Club, formed this year, has made a number of inspection trips, held discussion meetings, and had visiting speakers during the year.

University of Denver

Clem W. Collins, C.P.A., on February 1 took into partnership Roy A. Turner, a graduate of the University of Denver School of Commerce, class of 1925. The name of the new firm is Clem W. Collins and Co. and it will have offices in the University Building, Denver.

A decision was recently handed down in the United States Court of the First District of Colorado, which is of considerable interest to accountants. The state of Colorado has a statute conferring on public accountants the right of privileged communication, which provides that the accountant may not divulge facts concerning a client's business obtained through his professional connection, unless authorized by the client. An income tax case was brought in Federal Court at Denver in which a C.P.A. was asked on the witness stand to give certain information concerning his client, which he declined to do unless so ordered by the court. The court held that the state law did not apply in the Federal Courts and that he therefore must testify.

University of Illinois

Authority has recently been received from the Graduate School to offer work leading to the Ph.D. in accounting, effective in September 1936. It is assumed that the Department will, in general, recommend that students take minors in Economics, but no restrictions have been attached to the grant and the administration is left entirely to the Department. This is considered recognition of the work in accounting, since the executive faculty of the Graduate School, consisting chiefly of the representatives from other schools and departments of the University, conferred the right to grant the degree.

University of Kentucky

Mr. Robert D. Haun, associate professor of accounting, is to be on leave for the coming school year. His work will be taken over by Mr. Wendell Beals, who came to the University from the Central Y.M.C.A. College of Chicago, where he had been teaching for some years.

The Kentucky Legislature has passed an income tax both on individuals and on corporations, to become effective for the year 1936. Mr. Haun was one of the co-authors of the bill.

Louisiana State University

The Bureau of Business Research is planning two monographs in the near future, one on the topic of Goodwill, and the other a study of New Orleans as a commercial center. A course in Secretarial Accounting will be given for the first time this coming year.

The state Society of Certified Public Accountants has established a placement bureau, whereby it is hoped that satisfactory employment may be secured for graduates and other accountants.

Miami University

Mr. William J. Vatter, instructor in accounting for the past two years, is leaving the Department to do graduate work at the University of Chicago next year.

University of Montana

Professor Sanford will have charge of the Business courses for the summer session of the University.

A meeting of representatives of the State Society of C.P.A.'s with the University Committee was held recently at the University to reach some agreement on the interpretation of the latest accountancy act.

District Counsellor E. E. Davidson, of the University of Idaho, recently met with the local

chapter of Alpha Kappa Psi to aid in rehabilitating the work here.

College of the City of New York

Mr. John R. B. Byers has been promoted from the rank of instructor to that of Assistant Professor of Accountancy. Professor Byers has been made director of a survey to be conducted by the New Jersey Building and Loan League. The purpose of the survey is to draw up a standard chart of accounts for the fifteen hundred building and loan associations in the state of New Jersey.

New York University

"Cost Accounting" by Associate Professor Lang and Assistant Professor Harris of the Department is to be published this year by Ronald Press.

University of Oklahoma

Professor A. W. Johnson, from the University of West Virginia, is being added to the staff. Professor Barnes has been elected to the board of directors of the state Society of C.P.A.'s.

A new course in Accounting for the Petroleum Industry has been added to the curriculum for next year. The Accounting Club has been very active this year and has had a series of leading C.P.A.'s to speak to its meetings.

University of Oregon

Eleven accounting majors took the C.P.A. examinations on May 14 and 15 this year. Last year nine took the examination, of whom seven passed, one qualified, and one failed.

Syracuse University

Professor George E. Bennett, head of the accounting department, has been reappointed by the Regents of the University of the State of New York as a member of the Board of Certified Public Accountant Examiners for a term of five years.

The local chapter of the New York Society of Certified Public Accountants is sponsoring a Students' Society to be built around the Syracuse chapter of Beta Alpha Psi. Membership is to include members of Beta Alpha Psi and junior accountants in the offices of practicing accountants in Syracuse and surrounding towns.

Wayne University (Detroit)

Mr. Edward Dubpernell, formerly with the Kroger Baking Company, has been appointed instructor in accounting. Mr. Dubpernell has received his M.B.A. degree from the University of Michigan.

Mr. Olin E. Thomas is devoting part of his time to the developing of a system of financial controls for the University.

Yale University

Mr. George J. Heideman, instructor in accounting, is leaving the teaching staff at the close of the current year to take a position with the firm of Arthur Andersen & Co. in New York City.

A one term course in elementary accounting, introduced at the request of the liberal arts faculty will be given next year for the first time by Mr. Robert J. Dixon, Jr.

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